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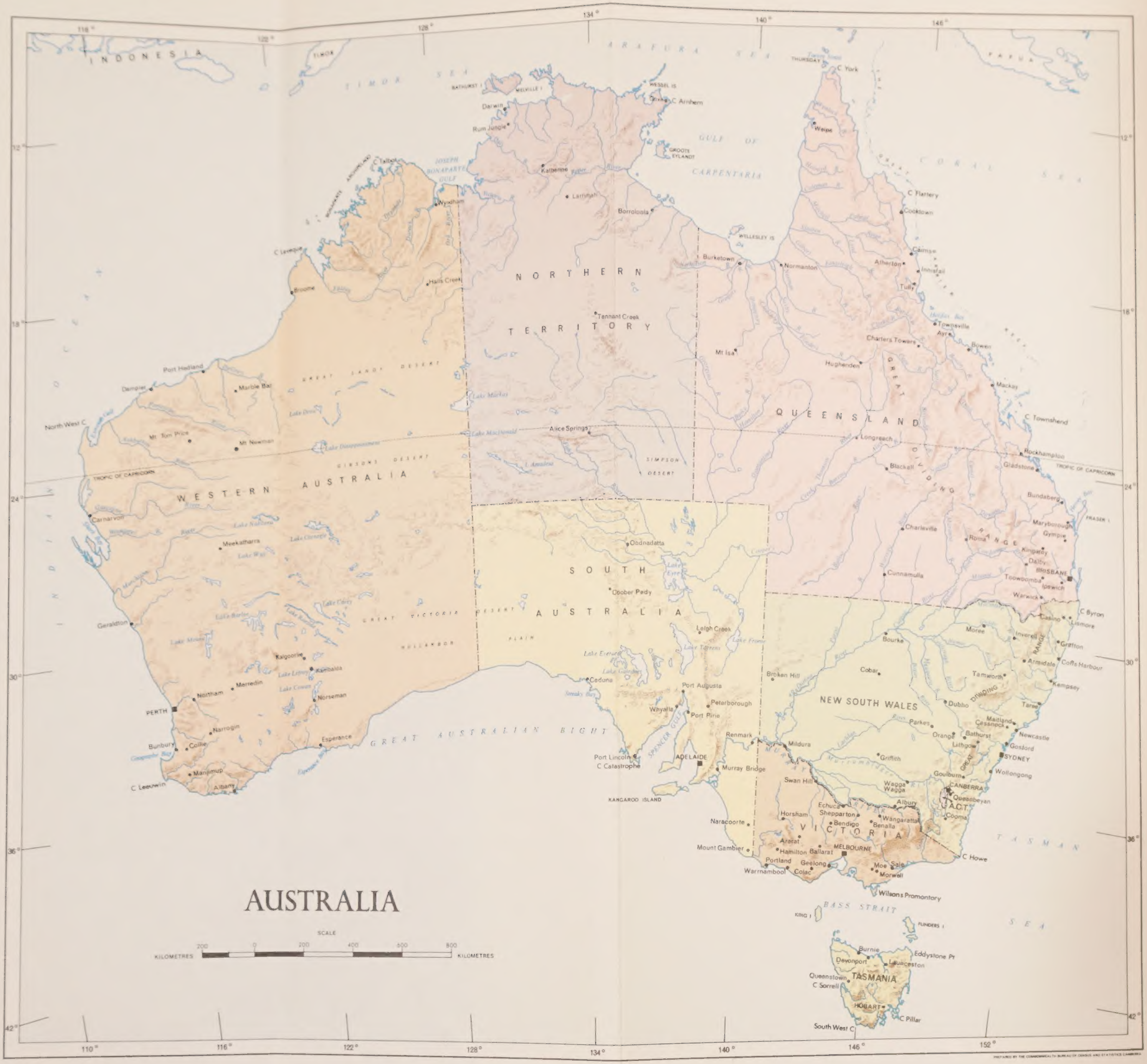
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INDONESIA
TIMOR
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PAPUA
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GULF OF CARPENTARIA
JOSEPH BONAPARTE GULF
GREAT AUSTRALIAN BIGHT
BASS STRAIT
SPENCER GULF
NORTHERN TERRITORY
WESTERN AUSTRALIA
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
A.C.T.
GREAT SANDY DESERT
GIBSON DESERT
GREAT VICTORIA DESERT
NULLARBOR PLAIN
SIMPSON DESERT
GREAT DIVIDING RANGE
TROPIC OF CAPRICORN
BATHURST I
MELVILLE I
WESSEL IS
GROOTE EYLANDT
WELLESLEY IS
THURSDAY I
FRASER I
KANGAROO ISLAND
KING I
FLINDERS I
C York
C Arnhem
C Flattery
C Townshend
C Byron
C Howe
C Leeuwin
C Leveque
C Talbot
North West C
C Catastrophe
C Sorrell
C Pillar
South West C
Wilsons Promontory
Eddystone Pt
Darwin
Rum Jungle
Katherine
Larrimah
Borroloola
Wyndham
Halls Creek
Broome
Port Hedland
Dampier
Marble Bar
Mt Tom Price
Mt Newman
Carnarvon
Meekatharra
Geraldton
Kalgoorlie
Kambalda
Norseman
Merredin
Northam
PERTH
Narrogin
Bunbury
Collie
Manjimup
Albany
Esperance
Tennant Creek
Alice Springs
Burketown
Normanton
Mt Isa
Weipa
Cooktown
Cairns
Atherton
Innisfail
Tully
Townsville
Ayr
Bowen
Charters Towers
Hughenden
Mackay
Longreach
Blackall
Rockhampton
Gladstone
Bundaberg
Maryborough
Gympie
Charleville
Roma
Kingaroy
Dalby
BRISBANE
Toowoomba
Ipswich
Warwick
Cunnamulla
Oodnadatta
Coober Pedy
Leigh Creek
Ceduna
Port Augusta
Peterborough
Whyalla
Port Pirie
Port Lincoln
Renmark
ADELAIDE
Murray Bridge
Naracoorte
Mount Gambier
Lake Eyre
Lake Torrens
Lake Frome
Lake Gairdner
Lake Everard
Lake Mackay
Lake Amadeus
Lake Disappointment
Casino
Lismore
Moree
Inverell
Grafton
Armidale
Coffs Harbour
Bourke
Cobar
Tamworth
Kempsey
Broken Hill
Dubbo
Taree
Parkes
Maitland
Cessnock
Newcastle
Orange
Bathurst
Lithgow
Gosford
SYDNEY
Mildura
Griffith
Goulburn
Wollongong
Wagga Wagga
CANBERRA
Queanbeyan
Albury
Cooma
Swan Hill
Echuca
Shepparton
Wangaratta
Benalla
Bendigo
Horsham
Ararat
Ballarat
Hamilton
MELBOURNE
Portland
Geelong
Warrnambool
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Moe
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PREPARED BY THE COMMONWEALTH BUREAU OF CENSUS AND STATISTICS CANBERRA

PLATE 1

OFFICIAL YEAR BOOK OF AUSTRALIA

OFFICIAL
YEAR BOOK
OF AUSTRALIA

No. 61, 1975 and 1976

Prepared under instructions from the Right Honourable the Treasurer by

R. J. CAMERON

AUSTRALIAN STATISTICIAN

AUSTRALIAN BUREAU OF STATISTICS

CANBERRA, AUSTRALIA

Registered by the Postmaster-General for transmission through the post as a book

ISBN 0 642 02240 2

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Commonwealth of Australia 1977

Printed by C. J. THOMPSON, Acting Commonwealth Government Printer, Canberra
(Printed in Australia)

PREFACE

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered, subject to the Constitution, 'to make laws for the peace, order, and good government of the Commonwealth, with respect to . . . Census and statistics.' In the exercise of the power so conferred, a Census and Statistics Act was passed in 1905, and in the year following the Commonwealth Bureau of Census and Statistics was created. During the late 1960s and early 1970s it became increasingly evident that new statistical legislation was required to enable the Bureau to respond to the changing needs of Government. As a consequence, the *Australian Bureau of Statistics Act*, 1975 was enacted in mid 1975. The Act came into operation from 3 May 1976. The legislation established the Australian Bureau of Statistics (ABS) as the central statistical authority for the Commonwealth Government, the office of the Australian Statistician and the Australian Statistics Advisory Council (ASAC).

The first Official Year Book was published early in 1908. This is the sixty-first Official Year Book issued under the authority of the Commonwealth Government. The Year Book is the principal general reference work produced by the Central Office of the Australian Bureau of Statistics. It provides a comprehensive and detailed statistical review of all aspects of the economy and social conditions of Australia, and in addition contains descriptive matter dealing with Australia's history, geography, physiography, climate and meteorology, government, defence and repatriation services, and international relations.

In the various chapters of the Year Book, and in the special index which precedes the general index, there are references to special articles, background material and items of historic interest which have appeared in previous issues.

Most of the statistics contained in this volume relate to the years ended June or December 1975. More detailed statistics on subjects dealt with in the Year Book are available in the various annual reports published by the ABS, and more recent statistics are contained in the *Digest of Current Economic Statistics* (monthly), the *Monthly Review of Business Statistics*, and in other publications issued monthly, quarterly, half-yearly, or yearly.

R. J. CAMERON
Australian Statistician

Australian Bureau of Statistics,
Canberra, A.C.T. 2600. March 1976

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SYMBOLS AND OTHER FORMS OF USAGE IN THIS YEAR BOOK

The following *symbols*, where shown in tables, mean:

n.a. —not available

.. —nil or less than half the final digit shown, or not applicable

p —preliminary—figure or series subject to revision

r —figure or series revised since previous issue

n.e.i.—not elsewhere included

n.e.c.—not elsewhere classified

n.s. —not stated

m.—males; f.—females; p.—persons

— Break in continuity of series (where drawn across a column between two consecutive figures).

A blank space in a column of figures means that the figure concerned is not yet available.

The following *abbreviations* are used for the titles of the Australian States and Territories and Australia: N.S.W. (New South Wales), Vic. (Victoria), Qld (Queensland), S.A. (South Australia), W.A. (Western Australia), Tas. (Tasmania), N.T. (Northern Territory), A.C.T. (Australian Capital Territory), Aust. (Australia).

In general, the *statistics in this volume relate to the States and Territories of Australia*, i.e. they exclude particulars of the External Territories of Australia, which, however, are specifically dealt with in Chapter 30, The Territories of Australia. A few series elsewhere include particulars of Papua New Guinea because of the nature of the subject-matter—these series are indicated.

Yearly periods shown as e.g. 1975 refer to the year ended 31 December 1975; those shown as e.g. 1974–75 refer to the year ended 30 June 1975. Other yearly periods are specifically indicated. The range of years shown in table headings, e.g. 1901 to 1974–75, indicates the period covered, but does not necessarily imply that each intervening year is included.

Values are shown in Australian dollars ($ or $A) or cents (c) unless another currency is specified.

Reference numbers. In the introductory paragraphs to most chapters a list of relevant publications is shown. In each case the reference number is shown in brackets and this should be quoted when ordering Bureau publications.

Any *discrepancies between totals and sums of components* in tables are due to rounding.

METRIC UNITS AND CONVERSION FACTORS

			Conversion Factors	
Quantity	*Imperial unit*	*Metric unit*	*Imperial to Metric units*	*Metric to Imperial units*
Length	inch (in)	millimetre (mm) *or* centimetre (cm)	1 in = 25.4 mm	1 cm = 0.394 in
	foot (ft)	centimetre (cm) *or* metre (m)	1 ft = 30.5 cm	1 m = 3.28 ft
	yard (yd)	metre (m)	1 yd = 0.914 m	1 m = 1.09 yd
	furlong (fur)	metre (m) *or* kilometre (km)	1 fur = 201 m	1 km = 4.97 fur
	mile	kilometre (km)	1 mile = 1.61 km	1 km = 0.621 mile
For navigation		international nautical mile (n mile)	1 n mile = 1852 m	
Mass	ounce (oz)	gram (g)	1 oz = 28.3 g	1 g = 0.0353 oz
	pound (lb)	gram (g) *or* kilogram (kg)	1 lb = 454 g	1 kg = 2.20 lb
	stone	kilogram (kg)	1 stone = 6.35 kg	1 kg = 0.157 stone
	ton	tonne (t)	1 ton = 1.02 t	1 t = 0.984 ton
Area	square inch (in^2)	square centimetre (cm^2)	1 in^2 = 6.45 cm^2	1 cm^2 = 0.155 in^2
	square foot (ft^2)	square centimetre (cm^2) *or* square metre (m^2)	1 ft^2 = 929 cm^2	1 m^2 = 10.8 ft^2
	square yard (yd^2)	square metre (m^2)	1 yd^2 = 0.836 m^2	1 m^2 = 1.20 yd^2
	perch (p)	square metre (m^2)	1 p = 25.3 m^2	1 m^2 = 0.0395 p
	rood (rd)	hectare (ha)	1 rd = 0.101 ha	1 ha = 9.88 rd
	acre (ac)	hectare (ha)	1 ac = 0.405 ha	1 ha = 2.47 ac
	square mile	square kilometre (km^2)	1 square mile = 2.59 km^2	1 km^2 = 0.386 square mile
Volume	cubic inch (in^3)	cubic centimetre (cm^3)	1 in^3 = 16.4 cm^3	1 cm^3 = 0.0610 in^3
	cubic foot (ft^3)	cubic metre (m^3)	1 ft^3 = 0.0283 m^3	1 m^3 = 35.3 ft^3
	cubic yard (yd^3)	cubic metre (m^3)	1 yd^3 = 0.765 m^3	1 m^3 = 1.31 yd^3
	bushel (bus)	cubic metre (m^3)	1 bus = 0.0364 m^3	1 m^3 = 27.5 bus
Volume (fluids)	fluid ounce (fl oz)	millilitre (ml)	1 fl oz = 28.4 ml	1 ml = 0.0352 fl oz
	pint (pt)	millilitre (ml) *or* litre (*l*)	1 pt = 568 ml	1 litre = 1.76 pt
	gallon (gal)	litre (*l*) *or* cubic metre (m^3)	1 gal = 4.55 litres	1 m^3 = 220 gal
	acre foot	cubic metre (m^3) *or* megalitre (Ml)	1 acre foot = 1230 m^3 = 1.23 Ml	1 Ml = 0.811 acre-foot
Force	pound-force (lbf)	newton (N)	1 lbf = 4.45 N	1 N = 0.225 lbf
	ton-force (tonf)	kilonewton (kN)	1 tonf = 9.96 kN	1 kN = 0.100 tonf
Pressure	pound per square inch (psi)	kilopascal (kPa)	1 psi = 6.89 kPa	1 kPa = 0.145 psi
	atmosphere (atm)	kilopascal (kPa) *or* megapascal (MPa)	1 atm = 101 kPa	1 MPa = 9.87 atm
	ton per square inch (ton/in^2)	megapascal (MPa)	1 ton/in^2 = 15.4 MPa	1 MPa = 0.0647 ton/in^2
For meteorology	inch of mercury (inHg)	millibar (mb)	1 inHg = 33.9 mb	1 mb = 0.0295 inHg
			1 mb = 100 Pa	
Speed	mile per hour (mph)	kilometre per hour (km/h)	1 mph = 1.61 km/h	1 km/h = 0.621 mph
For navigation		knot (kn)	1 kn = 1.85 km/h	
Temperature	degree Fahrenheit (°F)	degree Celsius (°C)	$^\circ\text{C} = \frac{5}{9}(^\circ\text{F} - 32)$	$^\circ\text{F} = \frac{9 \times {}^\circ\text{C}}{5} + 32$
Density	pound per cubic inch (lb/in^3)	gram per cubic centimetre (g/cm^3) = tonne per cubic metre (t/m^3)	1 lb/in^3 = 27.7 g/cm^3 1 lb/in^3 = 27.7 t/m^3	1 g/cm^3 = 0.0361 lb/in^3 1 t/m^3 = 0.0361 lb/in^3
	ton per cubic yard	tonne per cubic metre (t/m^3)	1 ton/yd^3 = 1.33 t/m^3	1 t/m^3 = 0.752 ton/yd^3
Energy	British thermal unit (Btu)	kilojoule (kJ)	1 Btu = 1.06 kJ	1 kJ = 0.948 Btu
	therm	megajoule (MJ)	1 therm = 106 MJ	1 MJ = 9.48 × 10^{-3} therm
For electrical energy		kilowatt hour (kWh)	1 kWh = 3.60 MJ	
Power	horsepower (hp)	kilowatt (kW)	1 hp = 0.746 kW	1 kW = 1.34 hp
Time		second (s)		
		minute (min)	1 min = 60 s	
		hour (h)	1 h = 3600 s	
Frequency	cycle per second (c/s)	hertz (Hz)	1 c/s = 1 Hz	1 Hz = 1 c/s
Angular velocity	revolution per minute (rpm)	radian per second (rad/s) revolution per minute (rpm)	1 rpm = 1.105 rad/s	1 rad/s = 9.55 rpm

CHAPTER 1

DISCOVERY, COLONISATION AND FEDERATION OF AUSTRALIA

Early knowledge and discovery of Australia

The following paragraphs contain only a bare outline of the pre-history and of the more important facts relating to the early history of Australian discovery. A more detailed summary of the discovery of Australia may be found in Year Book No. 39 (*see* page 1) and earlier issues.

Pre-history

Man entered the Australian continent from the South-East Asian area during the last glaciation, some 30,000 years ago, when sea levels were lower than in recent times. Nevertheless these first migrations would have entailed sea voyages of at least some 60 kilometres. Settlement was well established at least 25,000 to 30,000 years ago, and by 20,000 years ago almost all the continent was inhabited.

The original Australians lived as hunters and gatherers, using tools of wood, bone and stone. The archaeological evidence indicates that originally there was a simple, pan-continental tool-making tradition characterised by stone core tools and scrapers used to make further tools of wood. This tradition persisted until 5,000 to 6,000 years ago, when a series of new influences became apparent. A range of more specialised and sophisticated small tools was added to the old technology. The dingo, the only animal domesticated by the Aborigines, also entered the continent at this time. These new influences never reached Tasmania, isolated for some 12,000 years by the post-glacial rising seas, where a few thousand Tasmanian Aborigines maintained the culture of the late Pleistocene period until the European settlement of the island.

The Aborigines probably achieved maximum exploitation of local resources within the limits of their technology. Population balance had apparently been attained long before European settlement, and anthropologists accept that there were at least some 250,000 to 300,000 Aborigines in Australia in 1788. They were divided into some 500 small groups, speaking a variety of languages and dialects. These 'tribes' were further divided into families or clusters of family groups; these 'bands' formed the basic self-sufficient economic unit, and ranged within territorial limits. Labour was divided between the sexes, the men hunting, while the women foraged for the roots, seeds and small animals which formed a basic part of their subsistence. When abundant food or water supplies were available, or when ceremonial obligations demanded, local groups would congregate; in leaner times they scattered. Ceremonial exchanges of goods at these gatherings led to their wide dispersal. Religious and ceremonial activities related to the land, were a vital part of Aboriginal life. There is evidence that they had developed the use of ochre as a ritual painting material as early as 25,000 years ago, while some form of ritual burial was also practised at this time.

The physical barriers of distance and aridity within Australia itself, were cause in part of the cultural isolation and linguistic diversity of its people. European exploration and settlement was for most Aboriginal societies their first contact with an outside culture. The impact of this settlement led rapidly to the disappearance of the traditional Aboriginal way of life in those areas where the colonists established themselves most successfully.

Terra Australis

Although references to an Austral land are found in the works of writers in the early centuries after Christ, and evidence appeared in maps, globes, and manuscripts from the Middle Ages onward, there is no definite evidence connecting this so-called *Terra Australis* with Australia. Cornelius Wytfliet's map of 1597, however, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria.

Early discoveries of Australia

The Portuguese may have discovered part of the Australian coast before 1542, and it has been suggested that the Arabs may have come to Australia even earlier, though there is no evidence to support this theory. For all practical purposes, however, the coastal exploration of Australia may be taken as having begun with the Spaniards and the Dutch.

In 1606 the Spaniard Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought he had discovered the great land of the south, and therefore named the group *La Australia del Spiritu Santo*. After leaving the New Hebrides Quiros sailed eastward, but Torres, his second-in-command, took a westerly course and passed through the strait that now bears his name. In all probability he sighted the Australian continent but no mention of it is made in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam, Java, to explore the island of New Guinea. During March 1606 the *Duyfken* coasted along the southern shores of New Guinea and followed the west coast of Cape York peninsula as far as Cape Keer-Weer (Turn Again).

During the following thirty years there were nine visits by Dutch navigators to Australian waters; by 1636, through their efforts, the coast of Australia from Cape York westward around to the Great Australian Bight had been discovered.

In 1642 Abel Janszoon Tasman set out from Batavia to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-easterly discovered New Zealand and returned to Batavia. In his second voyage in 1644 Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far south as the tropic of Capricorn. This voyage of Tasman's may be said to have ended the period of Dutch discoveries, although there were subsequent visits by the Dutch to Australia (de Vlamingh in 1696 and Van Delft in 1705).

Discoveries by the English

In the meantime the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnet*, a trading vessel whose crew had turned buccaneers. In 1699 he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds, and reptiles observed, and of encounters with natives.

At the end of the seventeenth century it was uncertain whether Tasmania and New Zealand were parts of Australia or whether they were separated from it but themselves formed part of a great Antarctic Continent. Lieutenant (later Captain) James Cook's first voyage, though undertaken primarily for the purpose of observing the transit of Venus from Tahiti, had also the objective of ascertaining whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, and accompanied by Sir Joseph Banks the botanist, Dr Solander the naturalist, Green the astronomer, draughtsmen, and servants, Cook, after observing the transit of Venus at Tahiti, turned towards New Zealand, sighting that land on 7 October 1769 in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown.

Discovery of Australia by Captain Cook

On 20 April 1770* Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, on 29 April 1770* he discovered Botany Bay, where he landed. Cook sailed along the coast in a northerly direction for nearly 2,100 kilometres until 11 June 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months, and the *Endeavour* then again set her course to the north sailing through Torres Strait and eventually anchoring in the Downs on 13 July 1771. In 1772 Cook was put in command of the ships *Resolution* and *Adventure* with a view to ascertaining whether a great southern continent existed. Having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14 February 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance, the existence of a channel between the present State of Tasmania and the mainland of Australia, was made by Bass and Flinders in 1798.

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* Year Book No. 1 shows the dates of these events as '19th April' and '28th April' respectively. In Year Book No 2 they have been changed to '20th April' and '29th April', and the following footnote inserted:

'1. *Correct dates* of Captain Cook's Log. After the 180° meridian of longitude had been passed, and owing to no allowance having been made for westing, the various log-books of this voyage are in error one day as to dates. Thus those in Captain Cook's private log in his official log, in Gunner Forwood's, Pickergill's, Clerke's, Wilkinson's, and Bootie's Journals, in the Pallister copy of Cook's log, and in Wharton's publication, all need correction by adding one day to the date given: that is, the 19th should read the 20th, etc. The anonymous log, doubtless Green's, is erronously supposed by the author of the " Historical Records of New South Wales," to have been corrected for westing, see the footnote on page 269 therein. The facts are as follows:—What was known as " *ship time* " began a day earlier than under the present system of astronomical reckoning, that is to say, Jan. 1 began at noon Dec. 31. The "*Astronomical day*," however, was a whole day later than the *ship's day*: thus what would be assigned to the 24th in Cook's Journal would appear in Green's Journal as the 23rd. (See " Captain Cook's Journal," 1768–71, by Captain W. J. L. Wharton, R.N., F.R.S., London, 1893, preface pp. xii., xiii.). There can be no doubt as to the need of the correction in the dates, since on reaching Batavia the log reads:—" Wednesday 10th, according to our reckoning, but by the people here Thursday 11th." (Op. Cit., pp. 352–3.) Attention was drawn to this matter by Mr. P. de Jersey Grut in the " Argus," Melbourne, May 15, 18 and 22, 1907.'.

The annexation of Australia

Possession taken of eastern coast of Australia by Captain Cook

Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 22 August 1770† that the history of Australia was brought into definite political connection with western civilisation. It was on that date that Captain Cook took possession 'of the whole eastern coast, from latitude 38° S. to this place, latitude 10½° S. in right of His Majesty King George the Third', i.e. over only what are now the eastern parts of New South Wales, Victoria and Queensland.

Annexation of eastern part of Australian continent and Tasmania

Formal possession on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26 January 1788, when Captain Phillip's Commission, first issued to him on 12 October 1786 and amplified on 2 April 1787, was read to the people whom he had brought with him in the 'First Fleet'. The commission appointed Phillip 'Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south'.

Extension of New South Wales westward

On 17 February 1824 Earl Bathurst notified Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20 September 1824 of the coast from the 135th to the 129th degree of east longitude. On 16 July 1825 the whole territory between those boundaries was described in Darling's commission as being within the boundaries of New South Wales.

Annexation of Western Australia

An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George Sound, sailed from Sydney on 9 November 1826, landed at the Sound on 26 December following, and on 21 January 1827 hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few weeks after the departure of the expedition to King George Sound. He obtained the Governor's permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17 January 1827, and on his return in the following April submitted a glowing report on what he described as a 'rich and romantic country', urging its occupation for the purpose of settlement. He left for England in July 1827, continuing his advocacy, notwithstanding much discouragement, with unabated enthusiasm. He was at last successful, the result being due mainly to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June 1829. On the second of the preceding month Captain Fremantle, in command of H.M.S. *Challenger*, arrived and hoisted the British flag on the south head of Swan River, again asserting possession of 'all that part of New Holland which is not included within the Territory of New South Wales'. Thus before the middle of 1829 the whole territory now known as Australia had been constituted a dependency of the United Kingdom.

The creation of the several Colonies

New South Wales

In Governor Phillip's commission of 1786 the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not until 1798 that the contrary was known. In that year Bass and Flinders proved that it was an island by sailing through Bass Strait. The territory of New South Wales, as originally constituted (3,834,565 square kilometres, including Van Diemen's Land 67,897 square kilometres), and of New Zealand (269,000 square kilometres), which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 4,103,568 square kilometres. A further area of 1,341,971 square kilometres was added in 1825 when the western boundary was extended to 129th east meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 803,863 square kilometres. Following the transfer of the Australian Capital Territory and an area at Jervis Bay to the Commonwealth in 1911 and 1915 respectively the area was further reduced to 801,431 square kilometres.

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† In all issues up to Year Book No. 56 this date was incorrectly shown as 23 August 1770.

Lord Howe Island, which is a dependency of New South Wales, and for political purposes is included in one of the electorates of Sydney, is situated in latitude 31° 32′ south, longitude 159° 05′ east, about 800 kilometres east-north-east of Sydney, and has an area of 1,625 hectares.

Tasmania

Van Dieman's Land, first settled in 1803, was politically separated from New South Wales in 1825 being constituted a separate colony on 14 June. The area of the colony was 67,897 square kilometres. The name of the colony was officially changed to Tasmania in 1856 when responsible government was established. Following a resurvey of local government areas, the area of Tasmania was determined at 68,332 square kilometres at the end of 1964.

Macquarie Island, about 1,550 kilometres south-east of Hobart, together with a few rocky islets nearby, has been a part of Tasmania since the nineteenth centry. In December 1911 five members of the Australiasian Antarctic Expedition landed on the island and remained there until 1915. On 3 March 1948 another party was landed to man a new station which has been since maintained as a scientific base. The island is about 33 kilometres long and 6 kilometres wide.

Western Australia

The territory westward of the 129th meridian, comprising 2,527,633 square kilometres was constituted a colony under the name of Western Australia in June 1829. It was always distinct and independent of New South Wales, except for the settlement on King George Sound (*see* page 3), which remained under the jurisdiction of New South Wales until 1831.

South Australia

On 15 August 1834 the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a 'province', and settlement took place towards the end of the year 1836. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28 December 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 802,512 square kilometres of territory, lying south of the 26th parallel of south latitude and between the 141st* and 132nd meridians of east longitude. On 10 December 1861, by authority of the Imperial Act 24 and 25 Vict., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 129th east meridian. The area of the extension was approximately 181,870 square kilometres. Nearly two years later on 6 July 1863, the Northern Territory, comprising 1,356,176 square kilometres, was brought under the jurisdiction of South Australia, which thereupon controlled an area of 2,340,557 square kilometres. The Territory was transferred to the Commonwealth on 1 January 1911 (*see* page 5). Following a resurvey of Northern Territory notified in 1964 the area was reduced by 8,651 square kilometres.

New Zealand

Although Captain Cook had taken possession of the North Island of New Zealand in November 1769, and of the South Island in January 1770, it is doubtful whether at the time when Captain Phillip's commission was drawn up New Zealand was considered as one of the 'islands adjacent in the Pacific Ocean' (*see* page 3). The fact that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, and that in 1839 there was a proposal on the part of the British Government to appoint a consul in New Zealand, leaves this an open question, as nothing more than extra-territorial jurisdiction may have been intended. New Zealand does not appear to have become British territory unequivocally until 1840, when Captain Hobson arrived at the Bay of Islands, and on 30 January read his commissions, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. In February 1840 the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 21 May 1840 British sovereignty over the islands of New Zealand was explicitly proclaimed. New Zealand remained a dependency of New South Wales until, by letters patent of 16 November 1840, it was constituted a separate colony under the powers of the Act 3 and 4 Vict., cap. 62, of 7 August 1840. Proclamation of the separation was made on 3 May 1841. The area of the colony was 269,000 square kilometres. The present area of New Zealand, which acquired responsible government on 7 May 1856 and Dominion status on 26 September 1907, exclusive of island territories but including minor islands, is 268,667 square kilometres.

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* The actual surveyed boundary between South Australia and Victoria is at 140° 58′ east longitude.

Victoria

In 1851 the 'Port Phillip District' of New South Wales was constituted the colony of Victoria, 'bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia'. The area of the new colony was 227,620 square kilometres, and its separate existance took effect from 1 July 1851.

Queensland

The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt, and Port Curtis, together with the reputed county of Stanley, were granted an independent administration and formed into a distinct colony under the name of Queensland by letters patent dated 6 June 1859, although separation from New South Wales was not completed until 10 December of the same year. The territory comprised by the new colony was 'so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 28° 8′ south, running westward along the Macpherson and Dividing Ranges and the Dumaresq River to the MacIntyre River, thence downward to the 29th parallel of South latitude, and following that parallel westerly to the 141st meridian of east longitude, which is the eastern boundary of South Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean'. The area of the colony thus constituted was 1,435,637 square kilometres. By letters patent dated 13 March 1861, fowarded by the Colonial Secretary to the Governor of Queensland on 12 April 1862 the area of Queensland was increased by the annexation of ' so much of the colony of New South Wales as lies to the northward of the 26th parallel of south latitude, and between 141st and 138th meridians of east longitude, together with all the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria'. With this addition the area of Queensland became 1,736,595 square kilometres. Following a thorough revision of the area of each local government area of Queensland, based on the most recent maps available, the Surveyor-General in 1958 determined the area of Queensland as 1,727,530 square kilometres—a reduction of 9,065 square kilometres from the area previously determined.

The establishment of the Commonwealth of Australia

Federation

On 1 January 1901 the colonies mentioned, with the exception of New Zealand, were federated under the name of the 'Commonwealth of Australia', the designation of 'Colonies'—except in the case of the Northern Territory, to which the designation 'Territory' applied—being at the same time changed to that of 'States'.

Transfer of the Northern Territory to the Commonwealth

On 7 December 1907 the Commonwealth and the State of South Australia entered into an agreement for the transfer of the Northern Territory to the Commonwealth, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under The Northern Territory Surrender Act, 1907 and by the Commonwealth Parliament under the *Northern Territory Acceptance Act* 1910. The Territory was formally transferred to the Commonwealth on 1 January 1911, and became the Northern Territory of Australia.

By Imperial Order in Council dated 23 July 1931 Ashmore Islands, known as Middle, East and West Islands, and Cartier Island, situated in the Indian Ocean off the north-west coast of Australia, were placed under the authority of the Commonwealth. The islands were accepted by the Commonwealth on 10 May 1934, in the *Ashmore and Cartier Islands Acceptance Act* 1933, under the name of the Territory of Ashmore and Cartier Islands. The Act authorised the Governor of Western Australia to make ordinances having the force of law in and in relation to the Territory. An amendment to the Act in July 1938 annexed the islands to the Northern Territory, whose laws, ordinances, and regulations, wherever applicable, thereupon applied.

The area of Ashmore Reef is approximately 150 square kilometres (to the limit of the reef), and it is situated 350 kilometres off the western coast of Australia and 850 kilometres west of Darwin. Cartier Island is approximately 9 square kilometres in area (to the limit of the reef), and is situated 290 kilometres off the western coast of Australia and 790 kilometres west of Darwin.

Transfer of the Australian Capital Territory to the Commonwealth

On 18 October 1909 the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 2,359 square kilometres as the Seat of Government of the Commonwealth. In December 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5 December 1910 a proclamation was issued vesting the territory in the Commonwealth on and from 1 January 1911. By the *Jervis Bay Territory Acceptance Act* 1915 an area of 73 square kilometres at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4 September 1915.

Present composition of Australia

In 1973 the total area of Australia and of the individual States and Territories was determined by the Division of National Mapping as 7,682,300 square kilometres. (*For a description of the method used in calculation of the areas see* Chapter 2, page 26). The years in which the respective areas were annexed, the years of first permanent settlement, and the years in which responsible government was granted to the Colonies, and the present areas of the several States and Territories and of Australia are shown below.

AUSTRALIA: COMPONENT STATES AND TERRITORIES

State or Territory	*Year of annexation*	*Year of first permanent settlement*	*Year of formation into separate Colony or Territory*	*Year in which responsible government was granted*	*Present area in km²*
New South Wales	1770	1788	1786	1855	801,600
Victoria	1770	1834	1851	1855	227,600
Queensland	1770	1824	1859	(*a*)1859	1,727,200
South Australia	1788	1836	1834	1856	984,000
Western Australia	1829	1829	1829	1890	2,525,500
Tasmania	1788	1803	1825	1855	67,800
Northern Territory	..	..	(*b*)1863	..	1,346,200
Australian Capital Territory	..	..	(*c*)1911	..	2,400
Australia	..	..	..	(*d*)	**7,682,300**

(*a*) As part of New South Wales in 1855; as a separate colony in 1859. (*b*) Previously part of New South Wales then brought under the jurisdiction of South Australia in 1863—transferred to the Commonwealth in 1911. (*c*) Previously part of New South Wales. (*d*) Constituted as from 1 January 1901.

The Constitution of the Commonwealth of Australia

Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the federal movement in Australia, was embodied in this chapter in issues of the Year Book up to and including No. 22.

Commonwealth Constitution Act

The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: 'An Act to constitute the Commonwealth of Australia', as amended by the *Constitution Alteration* (*Senate Elections*) 1906, the *Constitution Alteration* (*State Debts*) 1909, the *Constitution Alteration* (*State Debts*) 1928, the *Constitution Alteration* (*Social Services*) 1946, and the *Constitution Alteration* (*Aboriginals*) 1967, is given *in extenso* hereunder, and the text contains all the alterations of the Constitution which have been made up to and including 31 December 1975.

THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT.
63 & 64 VICT., CHAPTER 12.

An Act to Constitute the Commonwealth of Australia. (9th July, 1900.)

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.

2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.

3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.

4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.

5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State: and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

6. " The Commonwealth " shall mean the Commonwealth of Australia as established under this Act.

" The States " shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called " a State."

" Original States " shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

THE CONSTITUTION.

This Constitution is divided as follows:—

Chapter I.—The Parliament:
  Part I.—General:
  Part II.—The Senate:
  Part III.—The House of Representatives:
  Part IV.—Both Houses of the Parliament:
  Part V.—Powers of the Parliament:
Chapter II.—The Executive Government:
Chapter III.—The Judicature:
Chapter IV.—Finance and Trade:
Chapter V.—The States:
Chapter VI.—New States:
Chapter VII.—Miscellaneous:
Chapter VIII.—Alteration of the Constitution.
The Schedule.

CHAPTER I.—THE PARLIAMENT.

PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called " The Parliament ", or " The Parliament of the Commonwealth ".

2. A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen's pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State.* The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in numbers as practicable; and the places of the senators of the first class shall become vacant at the expiration of [the third year] *three years*,† and the places of those of the second class at the expiration of [the sixth year] *six years*,† from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

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* The Parliament has otherwise provided, by means of the *Representation Act* 1948, that the number of senators shall be ten for each State from the first meeting of Parliament after the first dissolution of the House of Representatives occurring after the commencement of the Act (18 May 1948).

† As amended by Section 2 of the *Constitution Alteration* (*Senate Elections*) 1906. The words in square brackets have been repealed; amendments are shown in italics.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before** the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July** following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July** preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service, the House of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth, the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;
- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

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* As amended by Section 2 of the *Constitution Alteration* (*Senate Elections*) 1906. The words in square brackets have been repealed; amendments are shown in italics.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

25. For the purpose of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows:—

New South Wales	twenty-three;	South Australia	six;
Victoria	twenty;	Tasmania	five;
Queensland	eight;		

Provided that if Western Australia is an Original State, the numbers shall be as follows:—

New South Wales	twenty-six;	South Australia	seven;
Victoria	twenty-three;	Western Australia	five;
Queensland	nine;	Tasmania	five.

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:—

(i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen:

(ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.†

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

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* The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act* 1918, Sections 39 and 39A (repealing an earlier provision made by the *Commonwealth Franchise Act* 1902). For present qualifications *see* Chapter 3, General Government.

† The Parliament has otherwise provided, by means of the *Commonwealth Electoral Act* 1918, Section 69. For present qualifications *see* Chapter 3, General Government.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

Part IV.—Both Houses of the Parliament.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State, shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath of affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

(i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or
(ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or
(iii) Is an undischarged bankrupt or insolvent: or
(iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or
(v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section (iv) does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

(i) Becomes subject to any of the disabilities mentioned in the last preceding section: or
(ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors: or
(iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State:

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.*

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* The Parliamentary allowance has been varied from time to time. For current allowances, *see* Chapter 3, General Government.

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

(i) The mode in which its powers, privileges, and immunities may be exercised and upheld;
(ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

PART V.—POWERS OF THE PARLIAMENT.*

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:—

(i) Trade and commerce with other countries, and among the States:
(ii) Taxation; but so as not to descriminate between States or parts of States:
(iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth:
(iv) Borrowing money on the public credit of the Commonwealth:
(v) Postal, telegraphic, telephonic, and other like services:
(vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth:
(vii) Lighthouses, lightships, beacons and buoys:
(viii) Astronomical and meteorological observations:
(ix) Quarantine:
(x) Fisheries in Australian waters beyond territorial limits:
(xi) Census and statistics:
(xii) Currency, coinage, and legal tender:
(xiii) Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money:
(xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned.
(xv) Weights and measures:
(xvi) Bills of exchange and promissory notes:
(xvii) Bankruptcy and insolvency:
(xviii) Copyrights, patents of inventions and designs, and trade marks:
(xix) Naturalization and aliens:
(xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth:
(xxi) Marriage:
(xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:
(xxiii) Invalid and old-age pensions:
(xxiiiA) †*The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:*
(xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:
(xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:
(xxvi) The people of any race [other than the aboriginal race in any State]‡ for whom it is deemed necessary to make special laws:

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*Particulars of proposed laws which were submitted to referendums are referred to in Chapter 3, General Government, of this Year Book.

† Under Section 2 of the *Constitution Alteration (Social Services)* 1946, the Constitution was amended by the insertion of this paragraph.

‡ Under Section 2 of the *Constitution Alteration (Aboriginals)* 1967, the words in square brackets were omitted.

(xxvii) Immigration and emigration:

(xxviii) The influx of criminals:

(xxix) External affairs:

(xxx) The relations of the Commonwealth with the islands of the Pacific.

(xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:

(xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:

(xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:

(xxxiv) Railway construction and extension in any State with the consent of that State:

(xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:

(xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:

(xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:

(xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:

(xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

(i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:

(ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:

(iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.*

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which, until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.*

*** The number of Ministers of State and the annual appropriation for their salaries have been varied from time to time. For current particulars, *see* Chapter 3, General Government.**

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth:—

Posts, telegraphs, and telephones:
Naval and military defence:
Lighthouses, lightships, beacons and buoys:
Quarantine.

But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.*

72. The Justices of the High Court and of the other Courts created by the Parliament—

(i) Shall be appointed by the Governor-General in Council:
(ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity:
(iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.†

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

(i) Of any Justice or Justices exercising the original jurisdiction of the High Court:
(ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council:
(iii) Of the Inter-State Commission, but as to questions of law only:

and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits inter se of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

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* The *Judiciary Act* 1903 provided for a Chief Justice and two other Justices, increased by subsequent amendments to six.

† The *Judiciary Act* 1903 provided for the payment of a salary of £3,500 ($7,000) a year to the Chief Justice and of £3,000 ($6,000) a year to each other Justice. These amounts have been varied from time to time.

75. In all matters—

- (i) Arising under any treaty:
- (ii) Affecting consuls or other representatives of other countries:
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party:
- (iv) Between States, or between residents of different States, or between a State and a resident of another State:
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth:

the High Court shall have original jurisdiction.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation:
- (ii) Arising under any laws made by the Parliament:
- (iii) Of Admiralty and maritime jurisdiction:
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court:
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States:
- (iii) Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

(i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise bounties, for such time only as the Governor-General in Council may declare to be necessary:

(ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth:

(iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament:

(iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

(i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.

(ii) The Commonwealth shall debit to each State—

  (*a*) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;

  (*b*) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.

(iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

(i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State:

(ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned wherever the Colony, or the Government or an officer of the Colony is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation or trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard

being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The Members of the Inter-State Commission—

(i) Shall be appointed by the Governor-General in Council:

(ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:

(iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.†(1.) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

(*a*) *the taking over of such debts by the Commonwealth;*

(*b*) *the management of such debts;*

(*c*) *the payment of interest and the provision and management of sinking funds in respect of such debts;*

(*d*) *the consolidation, renewal, conversion, and redemption of such debts;*

(*e*) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*

(*f*) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(2.) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

(3.) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement*

(4.) *Any such agreement may be varied or rescinded by the parties thereto.*

(5.) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(6.) *The powers conferred by this section shall not be construed as being limited in any way by the provisions of section one hundred and five of this Constitution.*

CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

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* Under Section 2 of the *Constitution Alteration* (*State Debts*) 1909, the words in square brackets were omitted.

† Under Section 2 of the *Constitution Alteration* (*State Debts*) 1928, the Constitution was amended by the insertion of this section.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State; and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

*[127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.]

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

SCHEDULE.

OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. SO HELP ME GOD!

AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE. *The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

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* Under Section 3 of the *Constitution Alteration (Aboriginals)* 1967 the section in square brackets was repealed.

The Royal Proclamation

The preceding Act received the Royal assent on 9 July 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on 17 September 1900, constituted the Commonwealth as from 1 January 1901; it read as follows.

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

> WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled " An Act to constitute the Commonwealth of *Australia*," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland* and *Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.
>
> And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.
>
> We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales*, *Victoria*, *South Australia*, *Queensland*, *Tasmania*, and *Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.
>
> Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN!

The External Territories of Australia

Norfolk Island

In 1856 Norfolk Island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later, in 1896, it was made a dependency under the Governor of that colony, and finally by the passage of the *Norfolk Island Act* 1913 it was accepted as a Territory of the Commonwealth of Australia. The island is situated in latitude 29° 03′ S., longitude 167° 57′ E., and comprises an area approximately 36 square kilometres.

Australian Antarctic Territory

In Imperial Order in Council of 7 February 1933 placed under Australian authority 'all the islands and territories other than Adelie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East Longitude and the 45th degree of East Longitude'.

The Order came into force with a proclamation issued by the Governor-General on 24 August 1936, after the passing of the *Australian Antarctic Territory Acceptance Act* 1933 by the Commonwealth Parliament. The boundaries of Adelie Land were definitely fixed by a French Decree of 1 April 1938 as latitude 60° S., longitude 136° E., and longitude 142° E.

Heard and McDonald Islands

Heard and McDonald Islands, about 4,100 kilometres south-west of Fremantle, were transferred from United Kingdom to Australian control as from 26 December 1947. Heard Island is approximately 43 kilometres long and 20 kilometres wide, and McDonald Islands about 43 kilometres to the west of Heard Island, are small, rocky and precipitous.

Cocos [Keeling] Islands

The Cocos (Keeling) Islands Act 1955 provided for the acceptance of the Cocos Islands, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia and was parallel to an Act of the United Kingdom Parliament transferring authority over the islands to the Commonwealth. Consequent on the passing of these Acts, Her Majesty, by Order in Council, specified 23 November 1955 as the date of transfer. From that date the islands came under Australian administration. Day to day affairs in the Territory are managed by an Administrator under delegation from the Minister of Administrative Services. The Territory's area is about 14 square kilometres, and they are situated in the Indian Ocean in latitude 12° 05′ S. and longitude 96° 53′ E.

Christmas Island

The *Christmas Island Act* 1958 provided for the acceptance of Christmas Island, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia. Complementary legislation having been passed by the Parliament of the United Kingdom, the island was transferred to the Australian administration on 1 October 1958. Day to day affairs in the Territory are managed by an Administrator under delegation from the Minister of Administrative Services. The area of the island is about 140 square kilometres and it is situated in the Indian Ocean in latitude 10° 25′ S. and longitude 105° 40′ E.

Coral Sea Islands

The Coral Sea Islands were declared to be a Territory of the Commonwealth of Australia by the *Coral Sea Islands Act* 1969. The scattered reefs and islands, often little more than sandbanks, spread over a sea area of over 1 million square kilometres with only a few square kilometres of actual land area, between the Great Barrier Reef, latitude 12° S. and longitude 157° 10′ E.

CHAPTER 2

CLIMATE AND PHYSICAL GEOGRAPHY OF AUSTRALIA

General description of Australia

This chapter has been prepared by the Bureau of Meteorology, Department of Science. It is mainly concerned with the climate of Australia, although some geographic comparisons and a summary of landform features influencing climate have been included together with a summary of atmospheric climatic controls.

The climate of Australia is predominantly continental but the insular nature of the land mass is significant in producing modification of the continental pattern.

The island continent of Australia is relatively dry with 50 per cent of the area having a median rainfall of less than 300 millimetres per year and 80 per cent less than 600 millimetres. Extreme minimum temperatures are not as low as those recorded in other continents because of the absence of extensive mountain masses and because of the expanse of ocean to the south. However, extreme maxima are comparatively high, reaching 50°C over the inland, mainly due to the great east-west extent of the continent in the vicinity of the Tropic of Capricorn.

Climatic discomfort, particularly heat discomfort, is significant over most of Australia. During summer, prolonged high temperatures and humidity around the northern coasts and high temperatures over the inland cause physical discomfort. In winter, low temperatures and strong cold winds over the interior and southern areas can be severe for relatively short periods.

Position and area

Position. Australia, including Tasmania, comprises a land area of 7,682,300 square kilometres. The land lies between latitudes 10° 41′S (Cape York) and 43° 39′S (South East Cape, Tasmania) and between longitudes 113° 09′E (Steep Point) and 153° 39′E (Cape Byron). The most southerly point on the mainland is South Point (Wilson's Promontory) 39° 08′S. The latitudinal distance between Cape York and South Point, Wilson's Promontory (South East Cape, Tasmania) is about 3,180 kilometres (3,680 kilometres) respectively and the longitudinal distance between Steep Point and Cape Byron is about 4,000 kilometres.

Area of Australia compared with areas of other countries. The area of Australia is almost as great as that of the United States of America excluding Alaska, about 50 per cent greater than Europe (excluding U.S.S.R.) and 32 times greater than the United Kingdom. The following table shows the area of Australia in relation to areas of other continents and countries.

AREAS OF CONTINENTS AND COUNTRIES, ***circa*** **1970**

('000 square kilometres)

Country	*Area*	*Country*	*Area*
Continental divisions—		Europe(*a*)—	
Europe(*a*)	4,936	France	547
Asia(*a*)	27,532	Spain (including possessions)	505
U.S.S.R. (Europe and Asia)	22,402	Sweden	450
Africa	30,319	Finland	337
North and Central America and		Norway	324
West Indies	24,247	Poland	313
South America	17,834	Italy	301
Oceania	8,504	Yugoslavia	256
		Germany, Federal Republic of	248
		United Kingdom	244
Total, World excluding Arctic		Romania	237
and Antarctic continents	**135,771**	Other	1,189

(*a*) Excludes U.S.S.R., shown below.

AREAS OF CONTINENTS AND COUNTRIES, *circa* 1970—*continued*

('000 square kilometres)

Country	*Area*
Asia(*a*)—	
China, (excl. Taiwan Province)	9,561
India	3,268
Saudi Arabia	2,150
Iran	1,648
Mongolia	1,565
Indonesia	1,492
Pakistan	947
Turkey	781
Burma	678
Afghanistan	647
Thailand	514
Iraq	435
Other	4,058
U.S.S.R.	22,402
Africa—	
Sudan	2,506
Algeria	2,382
Congo, People's Republic of the	342
Zaire	2,345
Libya	1,760
Chad	1,284
Niger	1,267
Angola	1,247
South Africa, Republic of	1,221
Mali	1,240
Ethiopia	1,222
Mauritania	1,031
United Arab Republic	1,001
Tanzania, United Republic of	945
Nigeria	924
South-West Africa	824
Mozambique	783
Zambia	752
Africa—*continued*	
Somalia	638
Central African Republic	623
Madagascar	587
Kenya	583
Other	4,812
North and Central America—	
Canada	9,976
United States of America(*b*)	9,363
Greenland	2,176
Mexico	1,973
Nicaragua	130
Cuba	115
Honduras	112
Other	401
South America—	
Brazil	8,512
Argentina	2,777
Peru	1,285
Colombia (excluding Panama)	1,134
Bolivia	1,099
Venezuela	912
Chile	757
Paraguay	407
Ecuador	284
Other	653
Oceania—	
Australia	7,682
New Zealand	269
Papua New Guinea(*c*)	462
Other	91

(*a*) Excludes U.S.S.R., shown below. (*b*) Includes Hawaii. (*c*) West Irian is included in Other Asia.

Area, coastline, tropical and temperate zones, and standard times. The areas of the States and Territories and the length of the coastline were determined in 1973, by the Division of National Mapping, Department of National Resources, *by manually digitising these features from the* 1:250,000 *map series of Australia.* This means that only features of measurable size at this scale were considered. About 60,000 points were digitised at an approximate spacing of 0.5 kilometres. These points were joined by chords as the basis for calculation of areas and coastline lengths by computer.

The approximate high water mark coastline was digitised and included all bays, ports and estuaries which are open to the sea. In these cases, the shoreline was assumed to be where the seaward boundary of the title of ownership would be. In mangroves, the shoreline was assumed to be on the landward side. Rivers were considered in a similar manner but the decisions were rather more subjective, the line being across the river where it appeared to take its true form.

AREA, COASTLINE, TROPICAL AND TEMPERATE ZONES, AND STANDARD TIMES: AUSTRALIA

NOTE. *See* paragraphs page 26 for methods of estimating area and coastline.

	Estimated area			*Percentage of total area in*		*Standard time*	
State or Territory	*Total*	*Percentage of total area*	*Length of coastline*	*Tropical zone*	*Temperate zone*	*Meridian*	*Ahead of selected G.M.T.*
	km^2		km				hours
New South Wales	801,600	10 43	1,900	..	100	150°E	10.0
Victoria	227,600	2.96	1,800	..	100	150°E	10.0
Queensland	1,727,200	22.48	7,400	54	46	150°E	10.0
South Australia	984,000	12.81	3,700	..	100	142°30′E	9.5
Western Australia	2,525,500	32.87	12,500	37	63	120°E	8.0
Tasmania	67,800	0.88	3,200	..	100	150°E	10.0
Northern Territory	1,346,200	17.52	6,200	81	19	142°30′E	9.5
Australian Capital Territory	2,400	0.03	35	..	100	150°E	10.0
Australia	**7,682,300**	**100.00**	**36,735**	**39**	**61**	..	..

Landforms

The average altitude of the surface of the Australian land mass is only about 300 metres. Approximately 87 per cent of the total land mass is less than 500 metres and 99.5 per cent is less than 1,000 metres. The highest point is Mount Kosciusko (2,228 metres) and the lowest point is Lake Eyre (−15 metres).

Australia has three major landform features: the western plateau, the interior lowlands and the eastern uplands. The western half of the continent consists mainly of a great plateau of altitude 300 to 600 metres. The interior lowlands include the channel country of southwest Queensland (drainage to Lake Eyre) and the Murray–Darling system to the south. The eastern uplands consist of a broad belt of varied width extending from north Queensland to Tasmania and consisting largely of tablelands, ranges and ridges with only limited mountain areas above 1,000 metres.

The rivers of Australia may be divided into two major classes, those of the coastal plains with moderate rates of fall and those of the central plains with very slight fall. Of the rivers of the northern part of the east coast, the longest are the Burdekin and the Fitzroy in Queensland. The Hunter is the largest coastal river of New South Wales, and the Murray River, with its great tributary the Darling, drains part of Queensland, the major part of New South Wales, and a large part of Victoria, finally flowing into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 2,520 kilometres, about 650 being in South Australia and about 1,870 kilometres from South Australia to the source. The Darling from its junction with the Murray to its junction with the Culgoa is 1,390 kilometres. The Upper Darling (1,140 kilometres) incorporates the Barwon which commences at the junction of the Culgoa to its junction with the Weir River and the Macintyre River from its junction with the Weir to its source near Maybole. The rivers of the north-west coast of Australia (Western Australia), e.g. the Murchison, Gascoyne, Ashburton, Fortescue, De Grey, Fitzroy, Drysdale, and Ord are of considerable size. So also are those in the Northern Territory, e.g. the Victoria and Daly, and those on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert, and Mitchell. The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the country.

The 'lakes' of Australia may be divided into three classes: true permanent lakes; lakes which, being very shallow, become mere morasses in dry seasons or even dry up, and finally present a cracked surface of salt and dry mud; and lakes which are really inlets of the ocean, opening out into a lake-like expanse. The second class, which are a characteristic of the interior lowlands are of considerable extent. The largest are Lake Eyre 9,500 square kilometres, Lake Torrens 5,900 square kilometres and Lake Gairdner 4,300 square kilometres.

For further information on the landforms and the geographical features of Australia earlier issues of the Year Book should be consulted. The list of special articles, etc., at the end of this volume indicates the nature of the information available and its position in the various issues.

Climate of Australia

Climatic controls

The generally low relief of Australia causes little obstruction to the atmospheric systems which control the climate. A notable exception is the eastern uplands which interrupt the flow in the lower levels of the atmosphere.

In the winter half of the year (May–October) anticyclones, or high pressure systems, pass from west to east across the continent and often remain almost stationary over the interior for several days. These anticyclones may extend to 4,000 kilometres along their west-east axes. Northern Australia is then influenced by mild dry south-east trade winds and southern Australia experiences cool moist westerly winds. The westerlies and the frontal systems associated with extensive depressions travelling over the Southern Ocean have a controlling influence on the climate of southern Australia during the winter season, causing rainy periods. Cold outbreaks, particularly in south-east Australia, occur when cold air of Southern Ocean origin is directed northwards by intense depressions having diameters up to 2,000 kilometres. Cold fronts associated with the southern depressions, or with secondary depressions over the Tasman Sea, may produce large day-to-day changes in temperature in southern areas, particularly in south-eastern coastal regions.

In the summer half of the year (November–April) the anticyclones travel from west to east on a more southerly track across the southern fringes of Australia directing easterly winds generally over the continent. Fine warmer weather predominates in southern Australia with the passage of each anticyclone. Heat waves occur when there is an interruption to the eastward progression of the anticyclone (blocking) and winds back northerly and later north-westerly. Northern Australia comes under the influence of summer disturbances associated with the southward intrusion of warm moist monsoonal air from north of the inter-tropic convergence zone, resulting in a hot rainy season.

Tropical cyclones develop over the seas to the north-west and the north-east of Australia in summer between November and April. Their frequency of occurrence and the tracks they follow vary greatly from season to season. On the average about three Coral Sea cyclones per season directly affect the Queensland coast; and about two Indian Ocean cyclones affect the north-western coast. Tropical cyclones approaching the coast usually produce very heavy rain in coastal areas. Some cyclones move inland, losing intensity but still producing widespread heavy rainfall. Individual cyclonic systems may control the weather over northern Australia for periods extending to three weeks.

Rainfall

Annual. Rainfall for the years 1974 and 1975 is shown in Plates 2 and 3, pages 29 and 30. The annual 50 percentile* rainfall and the annual 10 and 90 percentiles are shown on Plates 4, 5 and 6 respectively. The area of lowest rainfall is east of Lake Eyre in South Australia, where the median (50 percentile) rainfall is only about 100 millimetres. Murnpeowie with 70 years of record, has a median annual rainfall of 101 millimetres. Another very low rainfall area is in Western Australia in the Giles–Warburton Range region, which has a median annual rainfall of about 150 millimetres. A vast region extending from the west coast near Shark Bay across the interior of Western Australia and South Australia to south-west Queensland and north-west New South Wales has a median annual rainfall of less than 200 millimetres. This region is not normally exposed to moist air masses for extended periods and rainfall is irregular, averaging only one or two days per month. However, in favourable synoptic situations, which infrequently occur over extensive parts of the region, up to 400 millimetres of rain may fall within a few days resulting in widespread flooding.

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* The amounts that are not exceeded by 10, 50 and 90 per cent of all recordings are the 10, 50 and 90 percentiles or the first, fifth and ninth deciles respectively. The 50 percentile is usually called the median.

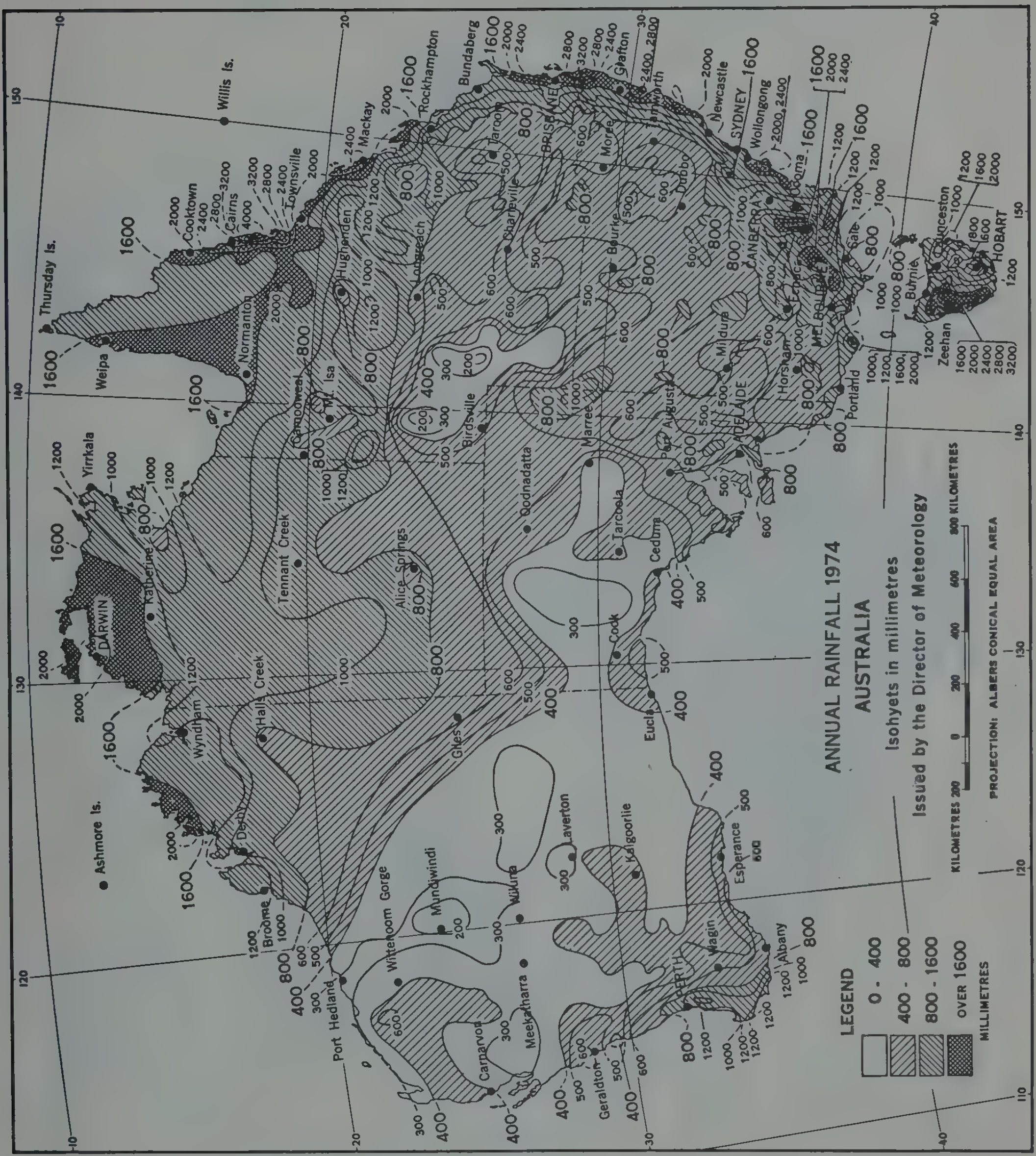

ANNUAL RAINFALL 1974
AUSTRALIA
Isohyets in millimetres
Issued by the Director of Meteorology
LEGEND
0 - 400
400 - 800
800 - 1600
OVER 1600
MILLIMETRES
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
DARWIN
Katherine
Yirrkala
Wyndham
Halls Creek
Derby
Broome
Port Hedland
Wittenoom Gorge
Mundiwindi
Wiluna
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
Esperance
Kalgoorlie
Laverton
Giles
Alice Springs
Tennant Creek
Camooweal
Mt. Isa
Normanton
Weipa
Thursday Is.
Cooktown
Cairns
Townsville
Hughenden
Longreach
Mackay
Rockhampton
Bundaberg
Taroom
Charleville
Birdsville
Oodnadatta
Marree
Tarcoola
Cook
Eucla
Ceduna
Port Augusta
ADELAIDE
Mildura
Horsham
Portland
MELBOURNE
Sale
Bourke
Moree
BRISBANE
Grafton
Tamworth
Dubbo
Newcastle
SYDNEY
Wollongong
CANBERRA
Cooma
Launceston
Burnie
Zeehan
HOBART
Willis Is.
Ashmore Is.

PLATE 2

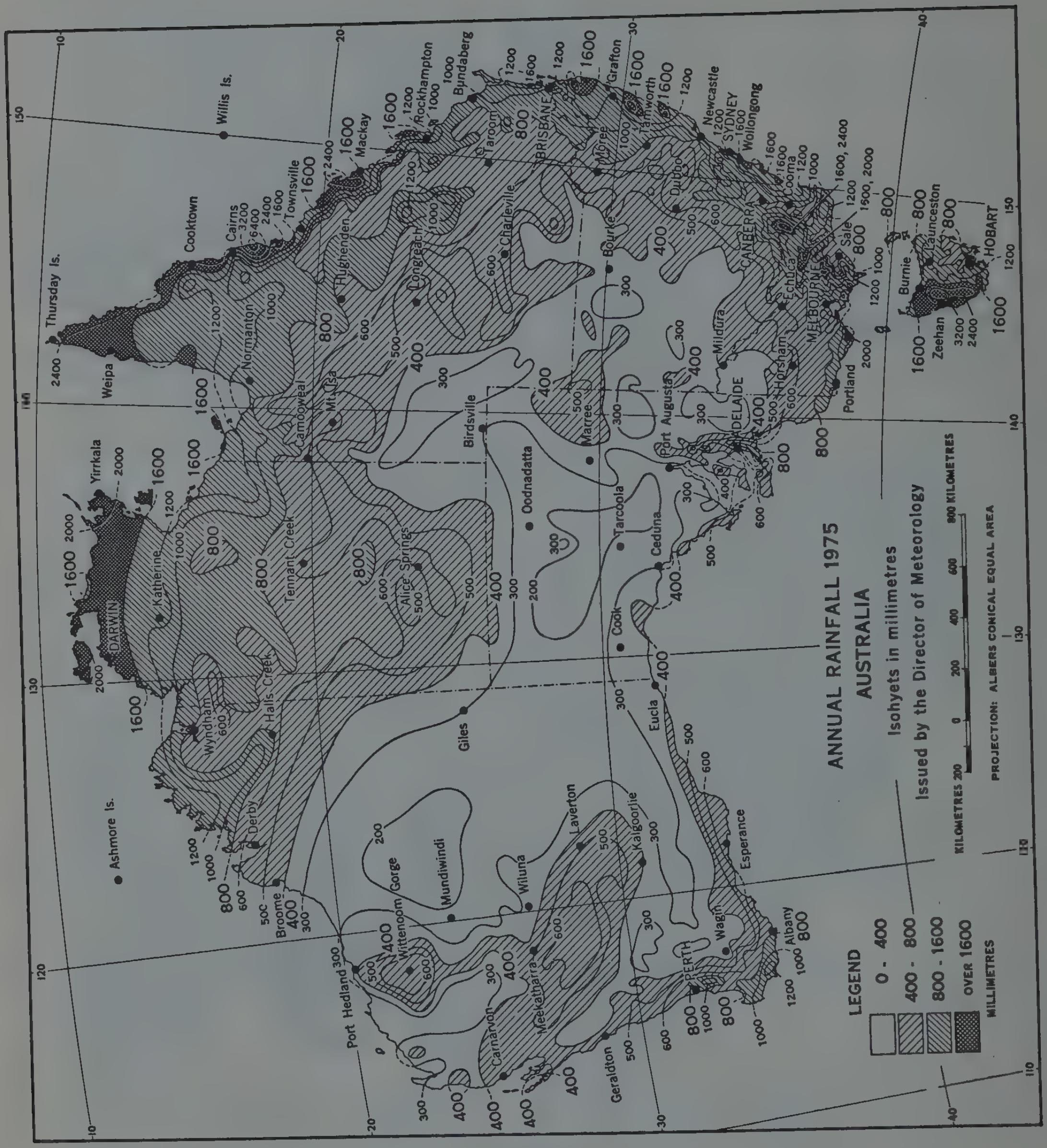

ANNUAL RAINFALL 1975
AUSTRALIA
Isohyets in millimetres
Issued by the Director of Meteorology
LEGEND
0 - 400
400 - 800
800 - 1600
OVER 1600
MILLIMETRES
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Weipa
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
BRISBANE
Grafton
Tamworth
Newcastle
SYDNEY
Wollongong
CANBERRA
Cooma
Sale
MELBOURNE
Echuca
Horsham
Portland
Mildura
ADELAIDE
Port Augusta
Marree
Birdsville
Oodnadatta
Tarcoola
Ceduna
Cook
Eucla
Esperance
Albany
Wagin
PERTH
Geraldton
Carnarvon
Meekatharra
Kalgoorlie
Laverton
Wiluna
Mundiwindi
Gorge
Wittenoom
Port Hedland
Broome
Derby
Halls Creek
Wyndham
Giles
Alice Springs
Tennant Creek
Katherine
DARWIN
Yirrkala
Camooweal
Mt Isa
Normanton
Hughenden
Longreach
Charleville
Taroom
Bourke
Moree
Dubbo
Willis Is.
Ashmore Is.
Burnie
Launceston
Zeehan
HOBART
10
20
30
40
110
120
130
140
150

PLATE 3

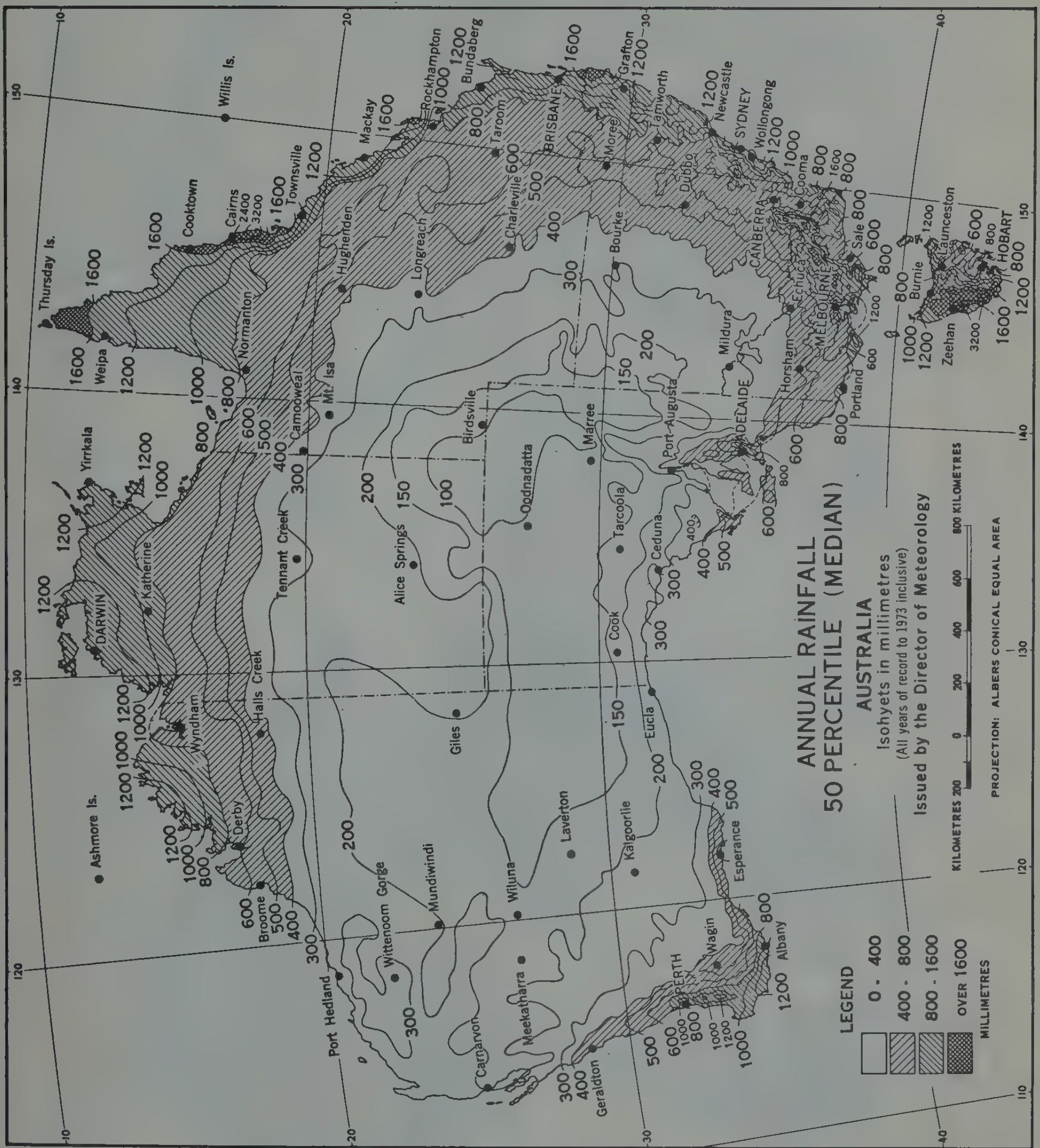
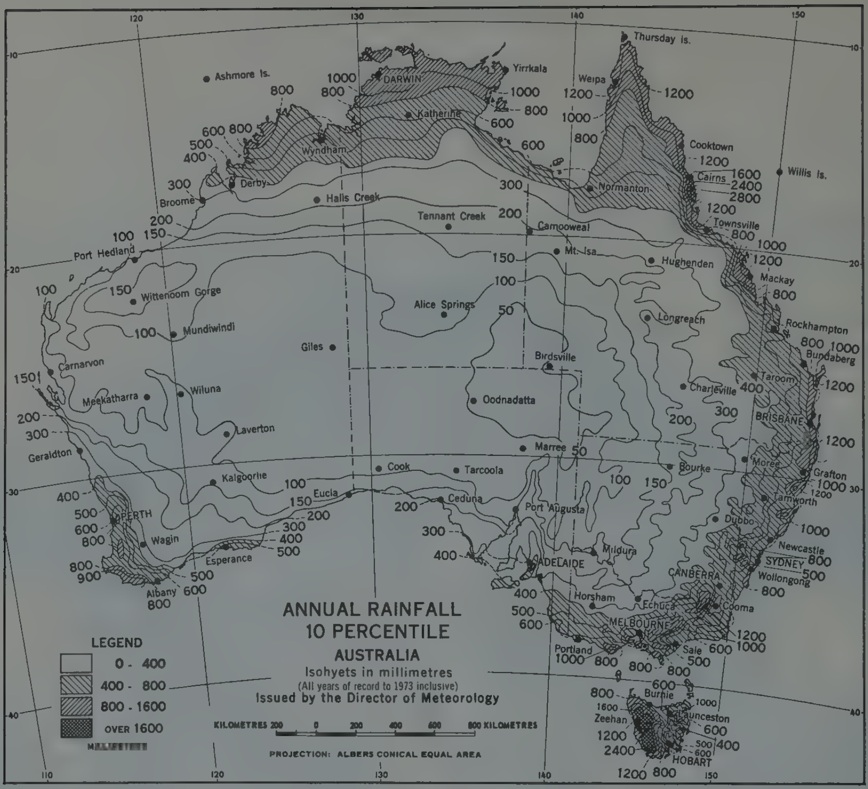

ANNUAL RAINFALL
50 PERCENTILE (MEDIAN)
AUSTRALIA
Isohyets in millimetres
(All years of record to 1973 inclusive)
Issued by the Director of Meteorology
LEGEND
0 - 400
400 - 800
800 - 1600
OVER 1600
MILLIMETRES
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Weipa
Cooktown
Cairns
Townsville
Willis Is.
Mackay
Rockhampton
Bundaberg
Taroom
BRISBANE
Grafton
Tamworth
Moree
Newcastle
SYDNEY
Wollongong
Dubbo
CANBERRA
Cooma
Sale
Echuca
MELBOURNE
Portland
Horsham
Mildura
ADELAIDE
Port Augusta
Launceston
Burnie
Zeehan
HOBART
Normanton
Hughenden
Longreach
Charleville
Bourke
Camooweal
Mt. Isa
Birdsville
Marree
Oodnadatta
Alice Springs
Tennant Creek
Tarcoola
Ceduna
Cook
Eucla
Yirrkala
DARWIN
Katherine
Wyndham
Halls Creek
Derby
Broome
Ashmore Is.
Port Hedland
Wittenoom Gorge
Mundiwindi
Giles
Wiluna
Laverton
Kalgoorlie
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
Esperance

PLATE 4


ANNUAL RAINFALL
10 PERCENTILE
AUSTRALIA
Isohyets in millimetres
(All years of record to 1973 inclusive)
Issued by the Director of Meteorology
LEGEND
0 - 400
400 - 800
800 - 1600
OVER 1600
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Ashmore Is.
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Cooktown
Willis Is.
Cairns
Derby
Normanton
Broome
Halls Creek
Townsville
Tennant Creek
Camooweal
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Bundaberg
Giles
Birdsville
Carnarvon
Taroom
Wiluna
Charleville
Meekatharra
Oodnadatta
BRISBANE
Laverton
Geraldton
Marree
Cook
Tarcoola
Bourke
Moree
Kalgoorlie
Grafton
Eucla
Ceduna
Tamworth
Port Augusta
PERTH
Dubbo
Wagin
Mildura
Newcastle
SYDNEY
Esperance
ADELAIDE
Wollongong
CANBERRA
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
110
120
130
140
150
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20
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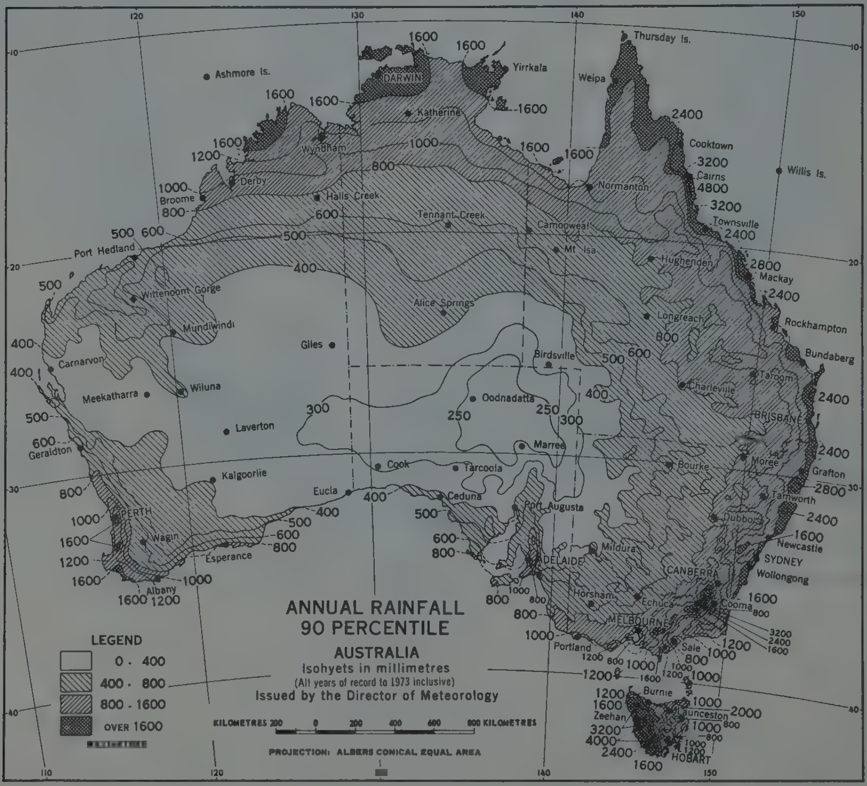
40


ANNUAL RAINFALL
90 PERCENTILE
AUSTRALIA
Isohyets in millimetres
(All years of record to 1973 inclusive)
Issued by the Director of Meteorology
LEGEND
0 - 400
400 - 800
800 - 1600
OVER 1600
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Ashmore Is.
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Cooktown
Willis Is.
Cairns
Derby
Normanton
Broome
Halls Creek
Townsville
Tennant Creek
Camooweal
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Bundaberg
Giles
Birdsville
Carnarvon
Taroom
Wiluna
Charleville
Meekatharra
Oodnadatta
BRISBANE
Laverton
Geraldton
Marree
Cook
Tarcoola
Bourke
Moree
Kalgoorlie
Grafton
Eucla
Ceduna
Tamworth
Port Augusta
PERTH
Dubbo
Wagin
Mildura
Newcastle
SYDNEY
Esperance
ADELAIDE
Wollongong
CANBERRA
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
110
120
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140
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30
40

PLATES 5 and 6

The region with the highest median annual rainfall is the east coast of Queensland between Cairns and Cardwell, where Tully's median is highest (4,400 millimetres). The mountainous region of western Tasmania also has a high annual rainfall, with 3,600 millimetres at Lake Margaret. In the mountainous areas of north-east Victoria and some parts of the east coastal slopes there are small pockets with median annual rainfalls greater than 2,500 millimetres but the map scale is too small for these to be shown.

The Snowy Mountains area in New South Wales also has a particularly high rainfall. The highest median annual rainfall isohyet drawn for this region is 3,200 millimetres and it is likely that small areas have a median annual rainfall approaching 4,000 millimetres on the western slopes above 2,000 metres elevation. (Gaffney 1971 (i)).

The following table shows the area distribution of the median annual rainfall derived from the map in Plate 4.

AREA DISTRIBUTION OF MEDIAN ANNUAL RAINFALL: AUSTRALIA

(Per cent)

Median annual rainfall	*W.A.*	*N.T.*	*S.A.*	*Qld*	*N.S.W.(a)*	*Vic.*	*Tas.*	*Aust.*
Under 200 mm .	43.5	15.5	74.2	10.2	8.0	Nil	Nil	29.6
200 to 300 mm .	29.6	35.6	13.5	13.0	20.3	6.3	Nil	22.9
300 ,, 400 ,, .	10.5	9.0	6.8	12.3	19.0	19.2	Nil	11.2
400 ,, 500 ,, .	4.3	6.6	3.2	13.5	12.4	11.8	Nil	7.6
500 ,, 600 ,, .	3.1	5.8	1.8	11.6	11.3	14.1	12.2	6.6
600 ,, 800 ,, .	4.6	11.6	0.5	20.5	15.1	24.5	18.2	10.7
800 ,, 1,200 ,, .	3.7	9.6	..	12.6	11.3	17.7	25.0	7.7
Above 1,200 ,, .	0.7	6.3	..	6.3	2.6	6.4	44.6	3.7
Total . .	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Includes Australian Capital Territory.

Seasonal. As discussed under the heading of climatic controls, the rainfall pattern is strongly seasonal in character with a winter rainfall regime in the south and a summer regime in the north.

The dominance of rainfall over other climatic elements in determining the growth of specific plants in Australia has led to the development of a climatic classification based on two main parameters. These parameters are median annual rainfall and seasonal rainfall incidence (Gaffney 1971 (ii)). Plate 7, page 34, is a simplified version of the seasonal rainfall zones arising from this classification.

Evaporation and the concept of rainfall effectiveness are taken into account to some extent in this classification by assigning higher median annual rainfall limits to the summer zones than the corresponding uniform and winter zones. The main features of the seasonal rainfall are:

(*a*) marked wet summer and dry winter of northern Australia;

(*b*) wet summer and relatively dry winter of south-eastern Queensland and north-eastern New South Wales;

(*c*) uniform rainfall in south-eastern Australia—much of New South Wales, parts of eastern Victoria and in southern Tasmania;

(*d*) marked wet winter and dry summer of south-west Western Australia and (to a lesser extent) of much of the remainder of southern Australia directly influenced by westerly circulation;

(*e*) arid area comprising about half of the continent extending from the north-west coast of Western Australia across the interior and reaching the south coast at the head of the Great Australian Bight.

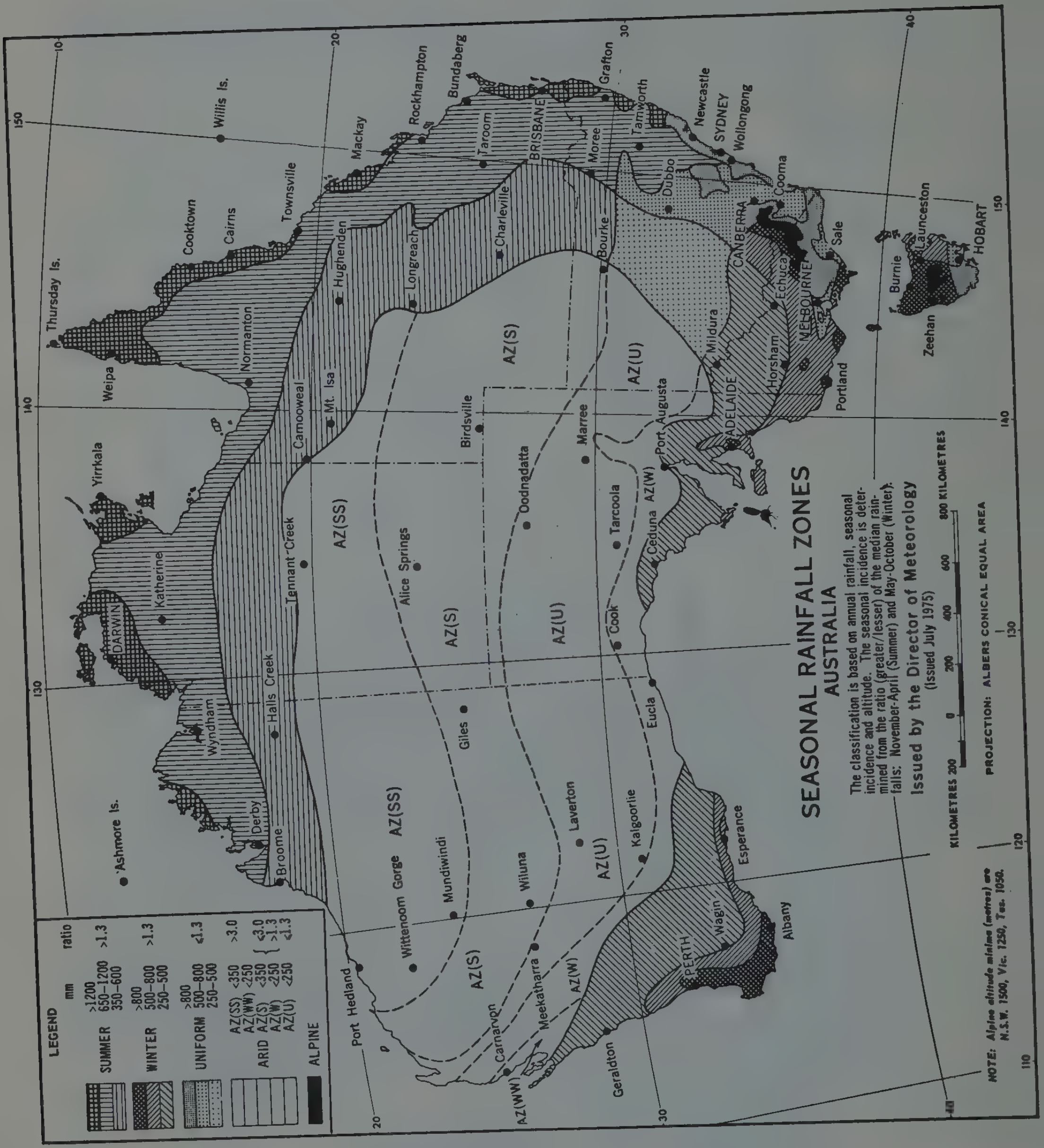

SEASONAL RAINFALL ZONES
AUSTRALIA
The classification is based on annual rainfall, seasonal incidence and altitude. The seasonal incidence is determined from the ratio (greater/lesser) of the median rainfalls: November-April (Summer) and May-October (Winter).
Issued by the Director of Meteorology
(Issued July 1975)
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
NOTE: Alpine altitude minima (metres) are N.S.W. 1500, Vic. 1250, Tas. 1050.
LEGEND mm ratio
SUMMER >1200 650–1200 350–600 >1.3
WINTER >800 500–800 250–500 >1.3
UNIFORM >800 500–800 250–500 <1.3
ARID AZ(SS) <350 >3.0
AZ(WW) <250 <3.0
AZ(S) <350 >1.3
AZ(W) <250 >1.3
AZ(U) <250 <1.3
ALPINE
10
20
30
40
110
120
130
140
150
Thursday Is.
Weipa
Cooktown
Cairns
Willis Is.
Townsville
Mackay
Rockhampton
Bundaberg
Normanton
Hughenden
Longreach
Taroom
Charleville
BRISBANE
Grafton
Moree
Tamworth
Newcastle
SYDNEY
Wollongong
Dubbo
Bourke
Cooma
CANBERRA
Sale
Launceston
HOBART
Burnie
Zeehan
Echuca
MELBOURNE
Mildura
Horsham
Portland
ADELAIDE
Port Augusta
Mt. Isa
Camooweal
Birdsville
Marree
Oodnadatta
Tarcoola
Ceduna
Yirrkala
Katherine
DARWIN
Tennant Creek
Alice Springs
Halls Creek
Wyndham
Cook
Eucla
Giles
Derby
Broome
Ashmore Is.
Wittenoom Gorge
Mundiwindi
Wiluna
Laverton
Kalgoorlie
Esperance
Wagin
Albany
PERTH
Meekatharra
Carnarvon
Geraldton
Port Hedland
AZ(SS)
AZ(S)
AZ(U)
AZ(W)
AZ(WW)

PLATE 7

Variability. The adequate presentation of rainfall variability over an extensive geographical area is difficult. Probably the best measures are found in tables compiled for a number of individual stations in some of the Climatic Survey districts. These tables show the percentage chances of receiving specified amounts of rainfall in monthly, seasonal or annual time spans. Statistical indexes of rainfall variation based on several techniques have been used to compile maps showing main features of the variability of annual rainfall over Australia.

One index for assessing the variability of annual rainfall is given by the ratio of the 90–10 percentile range to the 50 percentile (median value) i.e. Variability Index $= \left\{\dfrac{90 - 10}{50}\right\}$ percentiles. Variability based on this relationship (Gaffney 1975) is shown in Plate 8, page 36. The region of high to extreme variability shown in Plate 8, page 36, lies mostly in the arid zone with summer rainfall incidence, AZ(S), defined in Plate 7, page 34. In the winter rainfall zones the variability is generally low to moderate as exemplified by the south-west of Western Australia. In the tropics, random cyclone visitations cause extremely great variations in rainfall from year to year. At Onslow (Western Australia) annual totals vary from 15 mm in 1912 to 1,085 mm in 1961 and in the four consecutive years 1921 to 1924 the annual totals were 566, 69, 682, 55 mm respectively. At Whim Creek (Western Australia) where 747 mm have been recorded in a single day, only 4 mm were received in the whole of 1924. Great variability can also occur in the heavy rainfall areas; at Tully (Queensland) the annual rainfalls have varied from 7,899 mm in 1950 to 2,489 mm in 1961.

Rainday frequency. The average number of days per year with rainfall of 0.2 mm or more is shown in Plate 9, page 37.

The frequency of rain-days exceeds 150 per year in Tasmania, southern Victoria, parts of the north Queensland coast and in the extreme south-west of Western Australia with a maximum of over 200 in western Tasmania. Over most of the continent the frequency is less than 50 rain-days per year. The area of low rainfall with high variability, extending from the north-west coast of Western Australia through the interior of the continent, has less than 25 rain-days per year. In the high rainfall areas of northern Australia the number of rain-days is about 80 per year, but heavier falls occur in this region than in southern regions.

Intensity The highest rainfall intensities for some localities are shown in the first table page 38. These figures represent intensities over only small areas around the recording points because turbulence and exposure characteristics of the measuring gauge may vary over a distance of a few metres. The highest 24-hour (9 a.m. to 9 a.m.) falls are listed by States in the second table page 38. Most of the very high 24-hour falls (above 700 millimetres) have occurred in the coastal strip of Queensland, where a tropical cyclone moving close to mountainous terrain provides ideal conditions for spectacular falls. The highest 24-hour fall, 907 millimetres occurred at Crohamhurst, Queensland on 3 February 1893.

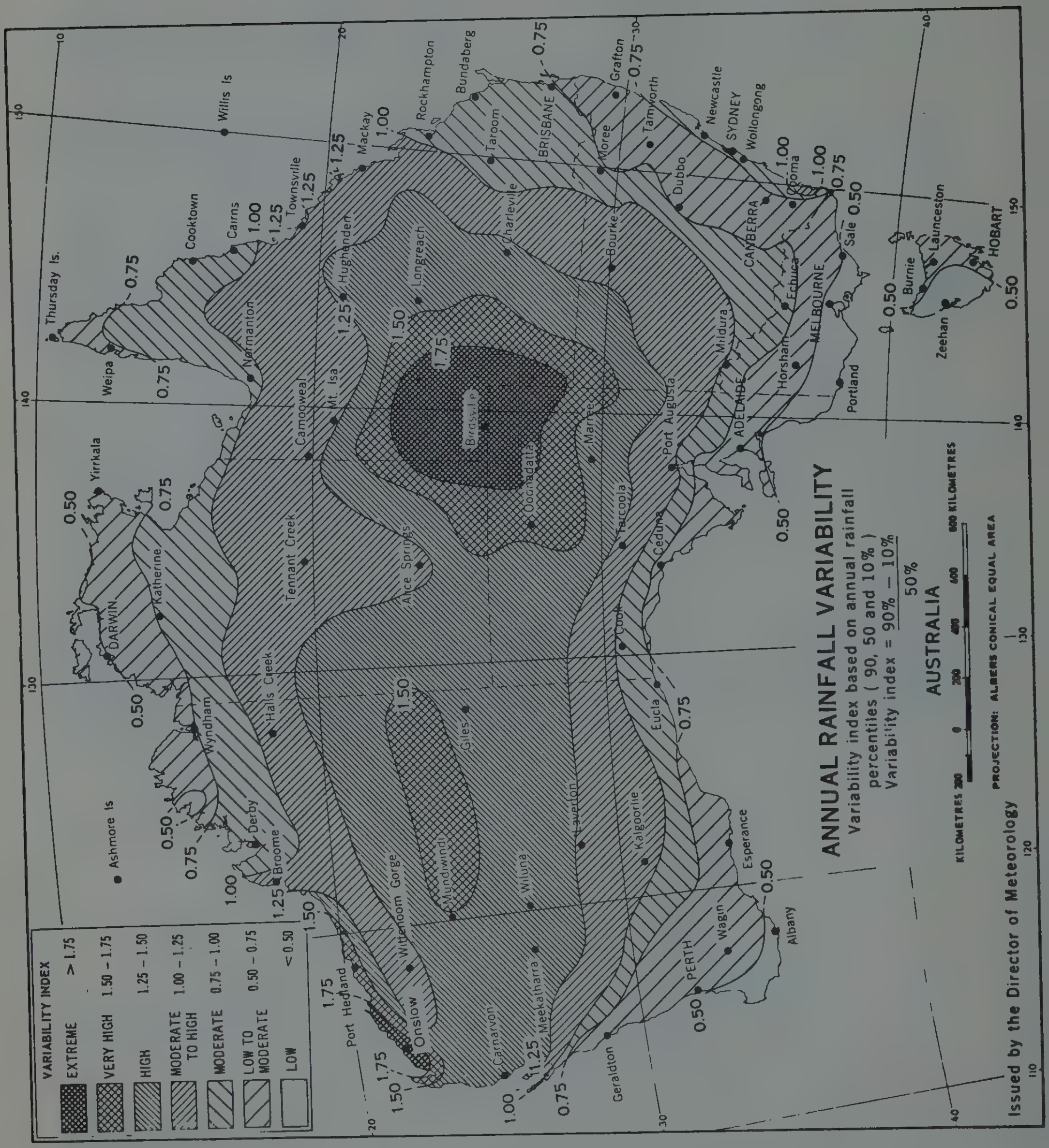

ANNUAL RAINFALL VARIABILITY
Variability index based on annual rainfall percentiles (90, 50 and 10%)
Variability index = (90% − 10%) / 50%
AUSTRALIA
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Issued by the Director of Meteorology
VARIABILITY INDEX
EXTREME >1.75
VERY HIGH 1.50 – 1.75
HIGH 1.25 – 1.50
MODERATE TO HIGH 1.00 – 1.25
MODERATE 0.75 – 1.00
LOW TO MODERATE 0.50 – 0.75
LOW <0.50
Thursday Is.
Weipa
Cooktown
Cairns
Willis Is
Townsville
Mackay
Rockhampton
Bundaberg
Taroom
BRISBANE
Grafton
Moree
Tamworth
Newcastle
SYDNEY
Wollongong
Dubbo
CANBERRA
Cooma
Sale
MELBOURNE
Echuca
Horsham
Portland
Mildura
ADELAIDE
Port Augusta
Bourke
Charleville
Longreach
Hughenden
Normanton
Mt. Isa
Camooweal
Birdsville
Marree
Oodnadatta
Tarcoola
Ceduna
Cook
Eucla
Alice Springs
Tennant Creek
Yirrkala
DARWIN
Katherine
Wyndham
Halls Creek
Giles
Derby
Broome
Ashmore Is
Port Hedland
Wittenoom Gorge
Onslow
Carnarvon
Mundiwindi
Wiluna
Meekatharra
Laverton
Kalgoorlie
Esperance
Geraldton
PERTH
Wagin
Albany
Burnie
Launceston
Zeehan
HOBART
0.50
0.75
1.00
1.25
1.50
1.75
10
20
30
40
110
120
130
140
150

PLATE 8

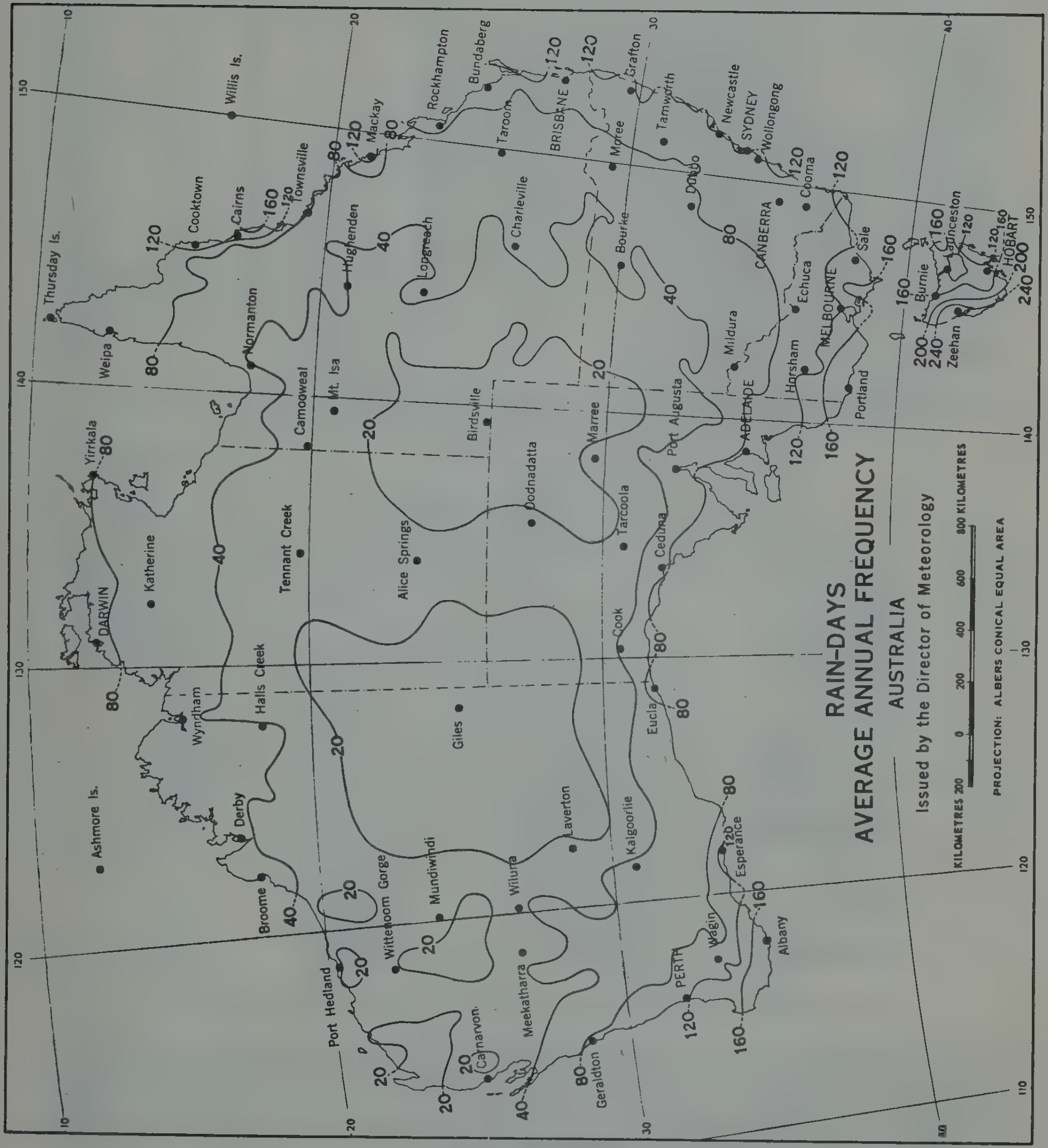

RAIN-DAYS
AVERAGE ANNUAL FREQUENCY
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Willis Is.
Ashmore Is.
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
BRISBANE
Grafton
Tamworth
Newcastle
SYDNEY
Wollongong
CANBERRA
Cooma
Sale
MELBOURNE
Portland
Horsham
Echuca
Mildura
ADELAIDE
Port Augusta
Ceduna
Tarcoola
Marree
Oodnadatta
Birdsville
Mt. Isa
Camooweal
Normanton
Weipa
Hughenden
Longreach
Charleville
Taroom
Moree
Bourke
Dubbo
Yirrkala
DARWIN
Katherine
Tennant Creek
Alice Springs
Giles
Wyndham
Halls Creek
Derby
Broome
Port Hedland
Wittenoom Gorge
Mundiwindi
Wiluna
Laverton
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
Esperance
Kalgoorlie
Eucla
Cook
Burnie
Launceston
Zeehan
HOBART
20
40
80
120
160
200
240
10
20
30
40
110
120
130
140
150

PLATE 9

HIGHEST RAINFALL INTENSITIES IN SPECIFIED PERIODS

(millimetres)

Station	*Period of record*	*Years of complete records*	*Period in hours* 1	3	6	12	24
			mm	mm	mm	mm	mm
Adelaide	1897–1967	67	69	133	141	141	141
Alice Springs	1951–1970	18	54	55	64	87	106
Brisbane	1911–1968	14	88	144	182	244	308
Broome	1948–1970	23	72	119	130	172	228
Canberra	1932–1970	35	51	68	71	89	138
Carnarvon	1956–1971	16	32	63	82	95	108
Charleville	1953–1971	19	42	66	75	111	142
Cloncurry	1953–1972	17	46	118	164	173	204
Darwin	1953–1970	15	88	101	109	152	191
Esperance	1963–1972	8	23	45	62	68	79
Hobart	1911–1970	57	28	56	87	117	168
Meekatharra	1953–1971	17	26	67	80	98	112
Melbourne	1878–1969	79	49	57	86	102	129
Mildura	1953–1971	17	49	60	65	65	91
Perth	1946–1971	24	32	38	47	64	93
Sydney	1913–1967	51	69	134	162	180	281
Townsville	1953–1970	16	87	111	122	161	275

Source: Pluviograph records in Bureau of Meteorology archives.

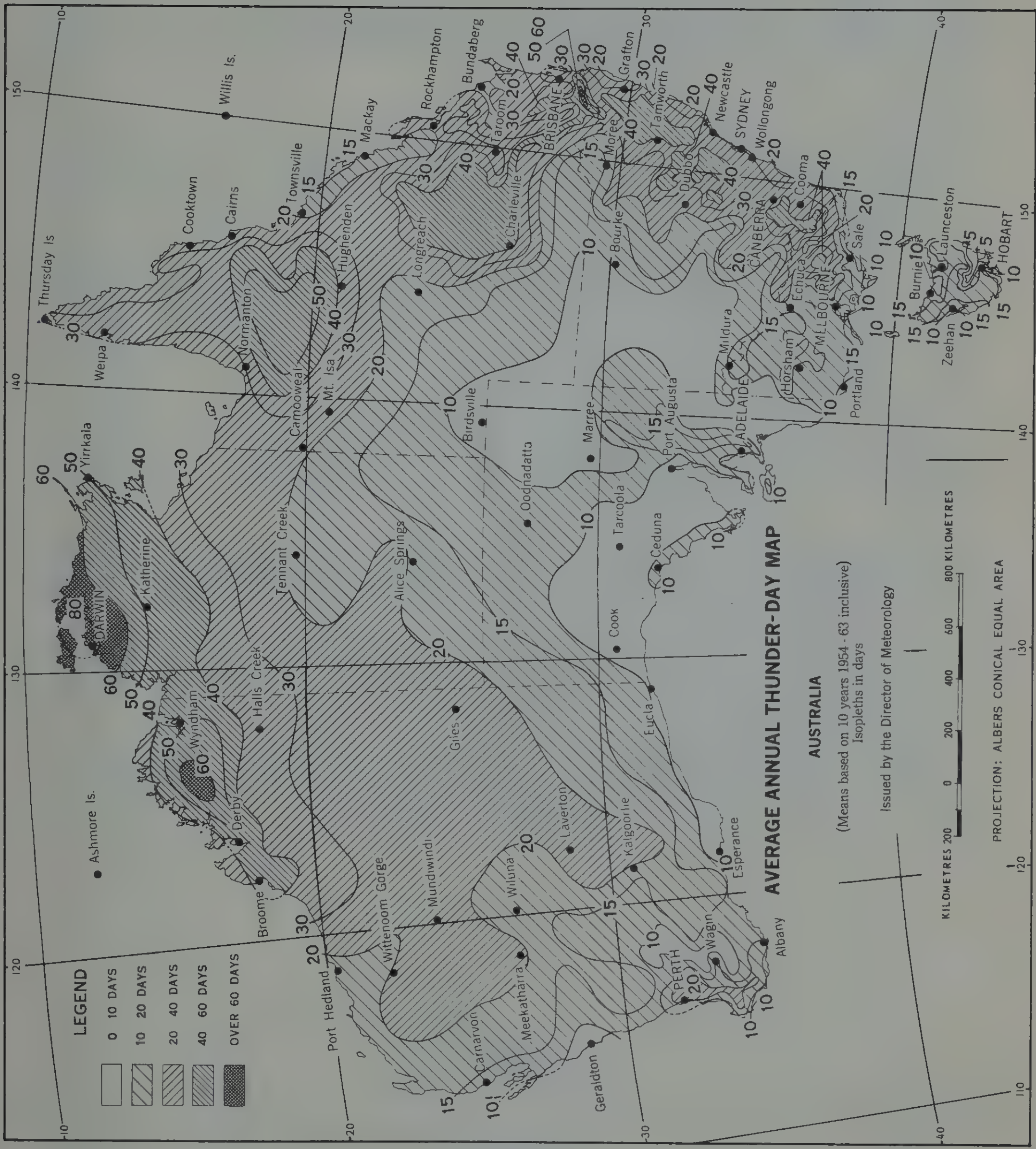
HIGHEST DAILY RAINFALLS

(all years to 1973 inclusive)

State	*Station*	*Date*	*Amount*
			mm
Queensland	Crohamhurst	3.2.1893	907
	Finch Hatton	18.2.1958	878
	Mount Dangar	20.1.1970	869
	Port Douglas	1.4.1911	801
Western Australia	Whim Creek	3.4.1898	747
	Fortescue	3.5.1890	593
New South Wales	Dorrigo	24.6.1950	636
	Cordeaux River	14.2.1898	574
Northern Territory	Roper Valley	15.4.1963	545
	Groote Eylandt	28.3.1953	513
Tasmania	Mathinna	5.4.1929	336
	Cullenswood	5.4.1929	282
Victoria	Balook	18.2.1951	275
	Hazel Park	1.12.1934	267
South Australia	Ardrossan	18.2.1946	206
	Carpa	18.2.1946	199

Thunderstorms and hail A thunder-day at a given location is a calendar day on which thunder is heard at least once. Plate 10 page 39 shows isopleths (isobronts) of the average annual number of thunder-days which varies from 80 per year near Darwin to less than 10 per year over parts of the southern regions. Convectional processes during the summer wet season cause high thunderstorm incidence in northern Australia. The generally high incidence (40-60 annually) over the eastern upland areas is produced mainly by orographic uplift of moist air streams.

Hail, mostly of small size (less than 10 millimetres diameter), occurs with winter/spring cold frontal activity in southern Australia. Summer thunderstorms, particularly over the uplands of eastern Australia, sometimes produce large hail (greater than 10 millimetres diameter). Hail, capable of piercing light gauge galvanised iron, occurs at irregular intervals sometimes causing widespread damage.



AVERAGE ANNUAL THUNDER-DAY MAP

AUSTRALIA

(Means based on 10 years 1954-63 inclusive)
Isopleths in days

Issued by the Director of Meteorology

PROJECTION: ALBERS CONICAL EQUAL AREA

LEGEND
0 10 DAYS
10 20 DAYS
20 40 DAYS
40 60 DAYS
OVER 60 DAYS
KILOMETRES 200 0 200 400 600 800 KILOMETRES
Thursday Is
Weipa
Cooktown
Cairns
Townsville
Willis Is.
Mackay
Rockhampton
Bundaberg
Taroom
BRISBANE
Grafton
Tamworth
Moree
Newcastle
SYDNEY
Wollongong
Dubbo
CANBERRA
Cooma
Sale
Bourke
Charleville
Longreach
Hughenden
Normanton
Camooweal
Mt. Isa
Birdsville
Marree
Port Augusta
ADELAIDE
Mildura
Echuca
MELBOURNE
Horsham
Portland
Burnie
Launceston
Zeehan
HOBART
Ashmore Is.
Yirrkala
DARWIN
Katherine
Tennant Creek
Alice Springs
Oodnadatta
Tarcoola
Ceduna
Cook
Eucla
Halls Creek
Wyndham
Derby
Broome
Port Hedland
Wittenoom Gorge
Mundiwindi
Giles
Wiluna
Laverton
Kalgoorlie
Esperance
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany

PLATE 10

Snow. Generally snow covers much of the Australian Alps above 1,500 metres for varying periods from late autumn to early spring. Similarly in Tasmania the mountains are covered fairly frequently above 1,000 metres in these seasons. The area, depth and duration are highly variable and in the altitude range 500–1,000 metres no snow falls in some years. Snowfalls at levels below 500 metres are occasionally experienced in southern Australia particularly in the foothill areas of Tasmania and Victoria but falls are usually light and short-lived. In some seasons parts of the eastern uplands above 1,000 metres from Victoria to south-eastern Queensland have been covered with snow for several weeks. In ravines around Mt Kosciusko (2,228 metres) small areas of snow may persist through summer but there are no permanent snowfields.

Temperature

Average temperatures. Average annual air temperatures as shown in plate 11, page 41 range from 28°C along the Kimberley coast in the extreme north of Western Australia to 4°C in the alpine areas of south-eastern Australia. Although annual temperature may be used for broad comparisons, monthly temperatures are required for detailed analyses.

July is the month with the lowest average temperature in all parts of the continent. The months with the highest average temperature are January or February in the south and December in the north, except in the extreme north and north-west where it is November. The slightly lower temperatures of mid-summer in the north are due to the increase in cloud during the wet season.

Average monthly maxima. Maps of average maximum and minimum temperatures for the months of January and July are shown in plates 12–15 inclusive.

In January average maximum temperatures exceed 35°C over a vast area of the interior and exceed 40°C over appreciable areas of the north-west. The consistently hottest part of Australia is around Marble Bar, Western Australia (150 kilometres south-east of Port Hedland) where the average is 41°C and daily maxima during summer may exceed 40°C consecutively for several weeks at a time.

The marked gradients of isotherms of maximum temperature in summer in coastal areas, particularly along the south and west coasts, are due to the penetration inland of fresh sea breezes initiated by the sharp temperature discontinuities between the land and sea surfaces. There are also gradients of a complex nature in south-east coastal areas caused primarily by the uplands.

Maximum temperatures percentiles for the months of January and July for selected stations are contained in the table, page 44. One measure of the variability of maximum and minimum temperatures is given in the magnitude of the ratio (percentage) of the 20 to 80 percentile range to the median (50 percentile). In January variabilities of maxima based on this criterion show marked spatial variation (Melbourne 50 per cent; Darwin 15 per cent).

In July a more regular latitudinal distribution of average maxima is evident. Maxima range from 30°C near the north coast to 5°C in the alpine areas of the south-east. The table shows that maxima are generally less variable in July than in January (Melbourne 25 per cent; Darwin 10 per cent).

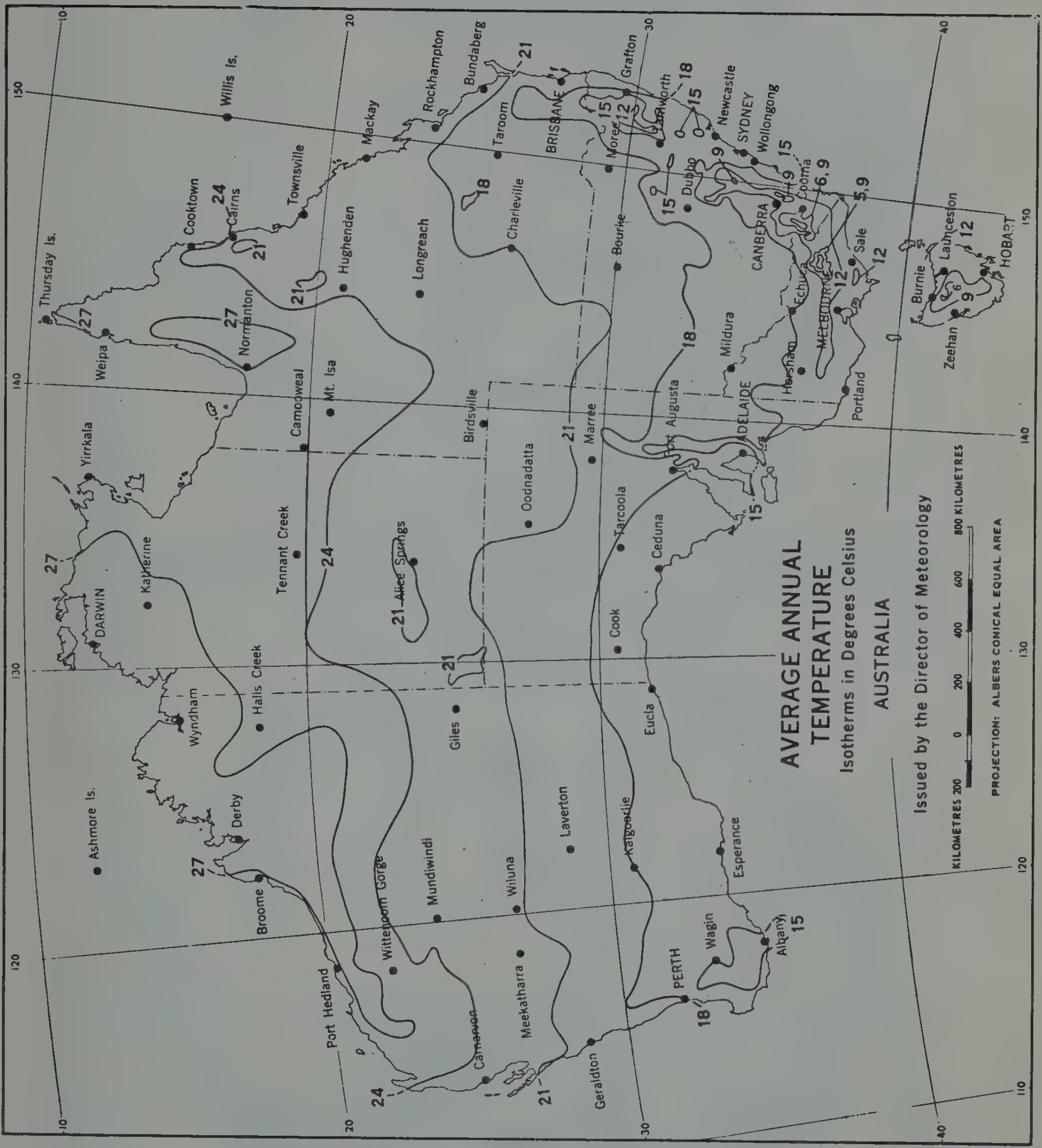
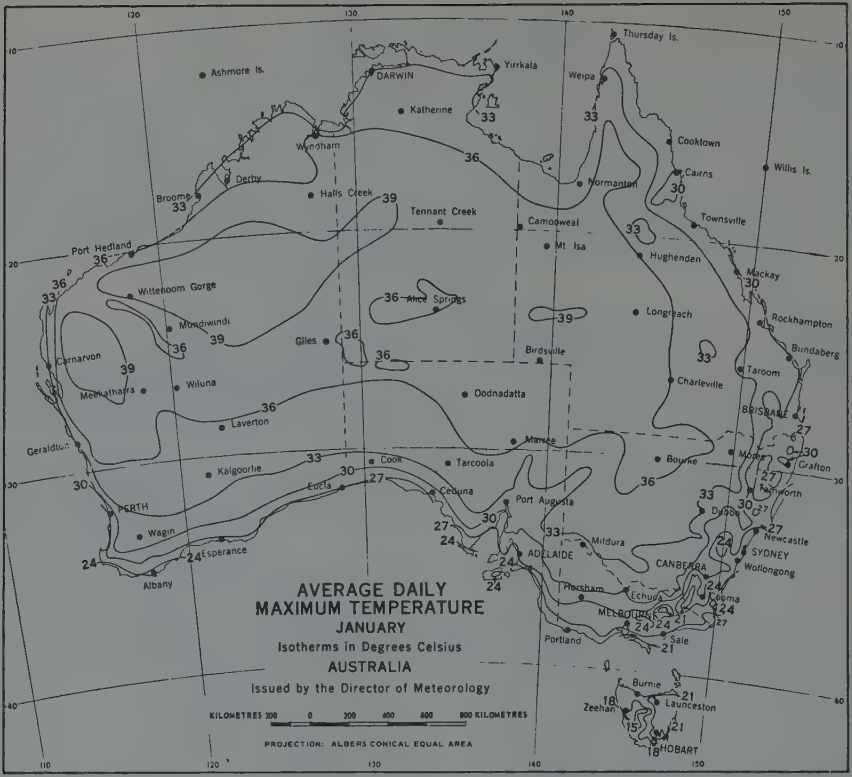
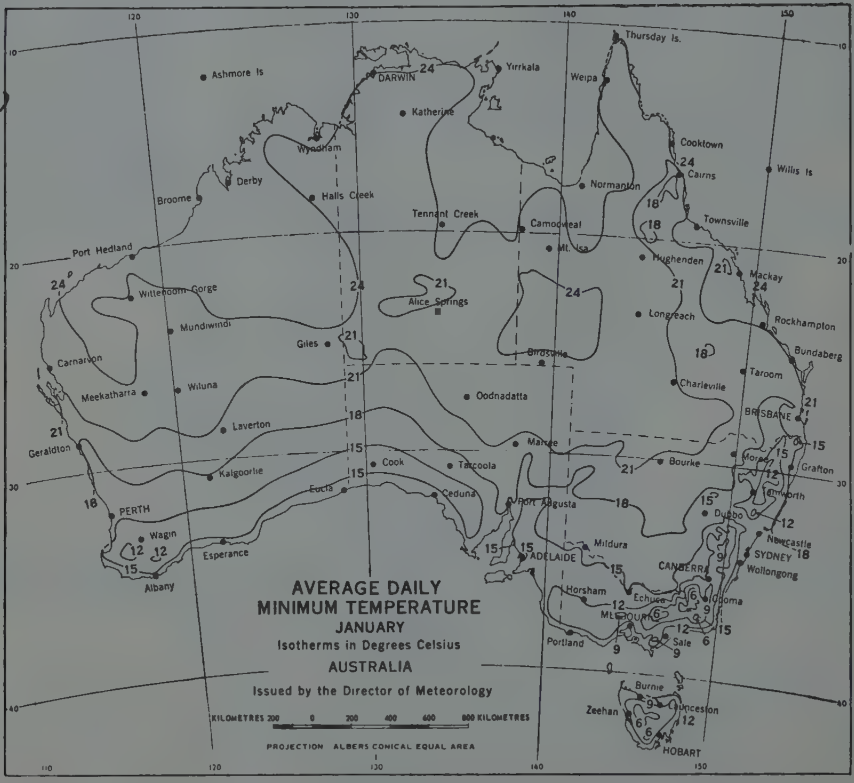
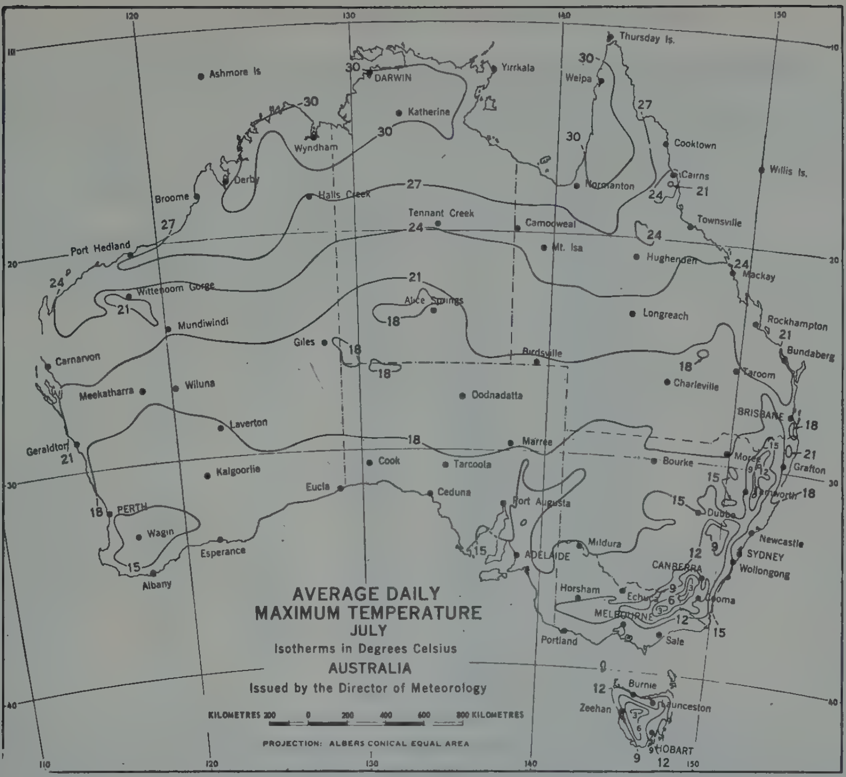

AVERAGE ANNUAL TEMPERATURE
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Weipa
Cooktown
Cairns
Willis Is.
Townsville
Normanton
Hughenden
Mackay
Rockhampton
Bundaberg
Longreach
Taroom
Charleville
BRISBANE
Grafton
Moree
Tamworth
Newcastle
SYDNEY
Wollongong
Dubbo
Bourke
CANBERRA
Cooma
Sale
Echuca
MELBOURNE
Mildura
Horsham
Portland
Burnie
Launceston
HOBART
Zeehan
Yirrkala
DARWIN
Katherine
Camooweal
Mt. Isa
Birdsville
Tennant Creek
Alice Springs
Oodnadatta
Marree
Port Augusta
ADELAIDE
Tarcoola
Ceduna
Cook
Eucla
Halls Creek
Wyndham
Giles
Ashmore Is.
Derby
Broome
Laverton
Mundiwindi
Wittenoom Gorge
Wiluna
Kalgoorlie
Esperance
Port Hedland
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
27
24
21
18
15
12
9
6
10
20
30
40
110
120
130
140
150

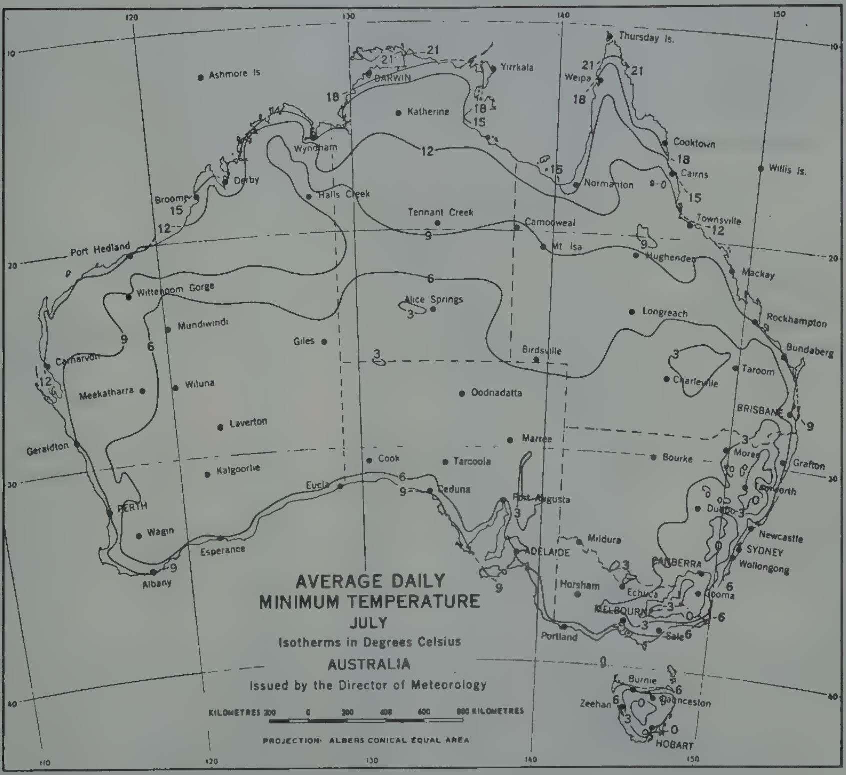
PLATE 11


AVERAGE DAILY
MAXIMUM TEMPERATURE
JANUARY
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Yirrkala
Weipa
DARWIN
Ashmore Is.
Katherine
Wyndham
Cooktown
Cairns
Willis Is.
Derby
Normanton
Broome
Halls Creek
Tennant Creek
Townsville
Camooweal
Mt Isa
Hughenden
Port Hedland
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Bundaberg
Birdsville
Carnarvon
Charleville
Taroom
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Moree
Geraldton
Grafton
Kalgoorlie
Cook
Tarcoola
Bourke
Eucla
Ceduna
Tamworth
Port Augusta
Dubbo
PERTH
Mildura
Newcastle
Wagin
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Sale
Portland
Burnie
Launceston
Zeehan
HOBART
39
36
33
30
27
24
21
18
15
110
120
130
140
150
10
20
30
40


AVERAGE DAILY
MINIMUM TEMPERATURE
JANUARY
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION ALBERS CONICAL EQUAL AREA
Thursday Is.
Yirrkala
Weipa
DARWIN
Ashmore Is
Katherine
Wyndham
Cooktown
Cairns
Willis Is
Derby
Normanton
Broome
Halls Creek
Tennant Creek
Townsville
Camooweal
Mt. Isa
Hughenden
Port Hedland
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Bundaberg
Birdsville
Carnarvon
Charleville
Taroom
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Moree
Geraldton
Grafton
Kalgoorlie
Cook
Tarcoola
Bourke
Eucla
Ceduna
Tamworth
Port Augusta
Dubbo
PERTH
Mildura
Newcastle
Wagin
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Sale
Portland
Burnie
Launceston
Zeehan
HOBART
24
21
18
15
12
9
6
110
120
130
140
150
10
20
30
40

PLATES 12 and 13


AVERAGE DAILY
MAXIMUM TEMPERATURE
JULY
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Ashmore Is
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Cooktown
Derby
Cairns
Willis Is.
Broome
Halls Creek
Normanton
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Bundaberg
Carnarvon
Birdsville
Charleville
Taroom
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Geraldton
Bourke
Moree
Grafton
Kalgoorlie
Cook
Tarcoola
Tamworth
Eucla
Ceduna
Port Augusta
Dubbo
PERTH
Newcastle
Wagin
Mildura
SYDNEY
Esperance
ADELAIDE
Wollongong
Albany
CANBERRA
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
30
27
24
21
18
15
12
9
6
3
0
110
120
130
140
150
10
20
30
40


AVERAGE DAILY
MINIMUM TEMPERATURE
JULY
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Ashmore Is
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Cooktown
Derby
Cairns
Willis Is.
Broome
Halls Creek
Normanton
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Bundaberg
Carnarvon
Birdsville
Charleville
Taroom
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Geraldton
Bourke
Moree
Grafton
Kalgoorlie
Cook
Tarcoola
Tamworth
Eucla
Ceduna
Port Augusta
Dubbo
PERTH
Newcastle
Wagin
Mildura
SYDNEY
Esperance
ADELAIDE
Wollongong
Albany
CANBERRA
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
21
18
15
12
9
6
3
0
-3
-6
110
120
130
140
150
10
20
30
40

PLATES 14 and 15

MAXIMUM TEMPERATURES DAILY: VARIABILITY IN JANUARY AND JULY
(20, 50 and 80 percentile values, °C.)

Station	Period of record	*January*			*July*		
		Percentiles			*Percentiles*		
		20	*50*	*80*	*20*	*50*	*80*
Adelaide	1955–70	22	26	33	13	14	16
Alice Springs	1949–68	33	36	38	15	18	22
Birdsville	1957–71	35	39	42	17	19	23
Brisbane	1948–68	27	28	30	18	20	22
Canberra	1950–59	23	27	32	9	11	13
Ceduna	1949–68	22	26	35	14	16	18
Charleville	1949–68	30	34	37	16	18	22
Cloncurry	1949–68	34	37	39	22	24	28
Daly Waters	1939–68	33	36	38	26	28	31
Darwin	1951–70	29	31	33	28	30	31
Halls Creek	1949–68	34	37	39	23	26	29
Hobart	1957–70	18	21	27	9	11	13
Kalgoorlie	1949–68	28	33	38	13	16	18
Mackay	1959–68	28	29	30	19	21	22
Marble Bar	1957–71	37	41	44	24	27	29
Melbourne	1955–68	21	24	33	11	13	14
Perth	1953–70	25	29	35	15	17	18
Port Hedland	1949–68	33	36	38	24	26	28
Sydney	1955–70	22	24	28	15	17	18
Thursday Island	1950–68	28	29	31	26	27	29
Wilcannia	1957–68	32	36	39	14	17	18

Average monthly minima. In January average minima range from 27°C on the north-west coast to 5°C in the alpine areas of the south-east. The table below contains minimum temperature percentiles for January and July at selected stations. In January variabilities of minima calculated from the 20–80 percentile range differ spatially, the value for Melbourne being 45 per cent and for Darwin 15 per cent. In July average minima fall below 5°C in areas south of the tropics (away from the coasts). Alpine areas record the lowest temperatures; the average is as low as −5°C. The table below shows that minima are more variable in July (Melbourne, 85 per cent; Darwin 20 per cent) than in January

MINIMUM TEMPERATURES DAILY: VARIABILITY IN JANUARY AND JULY
(20, 50 and 80 percentile values, °C.)

Station	Period of record	*January*			*July*		
		Percentiles			*Percentiles*		
		20	*50*	*80*	*20*	*50*	*80*
Adelaide	1955–70	13	16	20	6	8	9
Alice Springs	1949–68	17	21	24	0	3	7
Birdsville	1957–71	21	24	27	3	5	9
Brisbane	1948–68	19	20	22	7	9	12
Canberra	1950–59	9	12	15	−4	−1	7
Ceduna	1949–68	11	14	17	3	6	3
Charleville	1949–68	18	21	23	0	3	8
Cloncurry	1949–68	22	24	27	7	10	18
Daly Waters	1939–68	22	23	25	9	12	13
Darwin	1951–70	23	24	26	17	19	25
Halls Creek	1949–68	22	24	26	9	12	11
Hobart	1957–70	9	11	14	2	4	4
Kalgoorlie	1949–68	14	17	21	1	4	7
Mackay	1959–68	21	23	24	8	11	17
Marble Bar	1957–71	23	26	27	8	11	16
Melbourne	1955–68	10	14	16	3	6	3
Perth	1953–70	15	18	21	6	8	18
Port Hedland	1949–68	23	25	26	8	11	11
Sydney	1955–70	17	18	20	6	8	4
Thursday Island	1950–68	23	24	26	21	22	29
Wilcannia	1957–68	16	19	23	1	3	3

Extreme maxima. Temperatures have exceeded 45°C at nearly all inland stations more than 150 kilometres from the coast and at many places on the north-west and south coasts. Temperatures have exceeded 50°C at some inland stations and at a few near the coast. It is noteworthy that Eucla on the south coast has recorded the highest temperature in Western Australia 50.7°C. This is due to the long trajectory over land of hot north-west winds from the Marble Bar area. Although the highest temperature recorded in Australia was 53.1°C at Cloncurry (Queensland) more stations have exceeded 50°C in western New South Wales than other areas, due to the long land trajectory of hot winds from the north-west interior of the continent.

Extreme maximum temperatures recorded at selected stations, including the highest recorded in each State, are shown in the table below.

EXTREME MAXIMUM TEMPERATURES

(All years to 1973 inclusive)

Station	*°C*	*Station*	*°C*
Western Australia—		New South Wales—	
Eucla	50.7	Bourke	52.8
Roebourne	49.5	White Cliffs	51.1
Marble Bar	49.2	Walgett	50.1
Northern Territory—		Wilcannia	50.0
Charlotte Waters (near Finke)	48.2	Menindee	49.7
South Australia—		Australian Capital Territory—	
Oodnadatta	50.7	Canberra	42.2
Kyancutta	49.3	Victoria—	
Queensland—		Mildura	50.8
Cloncurry	53.1	Tasmania—	
Winton	50.7	Bushy Park	40.9
Birdsville	50.0	Hobart	40.7

Extreme minima. The lowest temperatures in Australia have been recorded in the Snowy Mountains, where Charlotte Pass (elevation 1,760 metres) has recorded −22.2°C. Temperatures have fallen below −5°C at most inland places south of the tropics and at some places within a few kilometres of southern coasts. At Eyre on the south coast of Western Australia a minimum of −3.9°C has been recorded and at Swansea on the east coast of Tasmania, the temperature has fallen as low as −4.4°C.

In the tropics, extreme minima below 0°C have been recorded at many places away from the coasts as far north as Herberton, Queensland (−3.3°C). Even very close to the tropical coastline temperatures have fallen to 0°C, a low recording being −0.8°C for Mackay.

The next table shows extreme minimum temperatures recorded at specified stations, including the lowest recorded in each State.

EXTREME MINIMUM TEMPERATURES

(All years to 1973 inclusive)

Station	*°C*	*Station*	*°C*
Western Australia—		New South Wales—	
Dwellingup	−7.0	Charlotte Pass	−22.2
Booylgoo	−6.7	Kiandra	−20.6
Salmon Gums	−5.4	Kosciusko Hotel	−14.4
Northern Territory—		Cooma	−11.2
Alice Springs	−7.2	Australian Capital Territory—	
Tempe Downs	−6.0	Canberra	−10.0
South Australia—		Victoria—	
Yongala	−8.1	Mount Hotham	−12.8
Kyancutta	−7.0	Omeo	−10.0
Queensland—		Bairnsdale	−7.2
Stanthorpe	−11.0	Tasmania—	
Nanango	−9.3	Oatlands	−12.8
		Bothwell	−12.5

Temperature range. The average annual temperature range values shown in plate 16, page 47, have been determined by subtracting the lowest average monthly minimum from the highest average monthly maximum. On the basis of this criterion the greatest average range is 33°C over the western interior and the least is 9°C at the tip of Cape York Peninsula. The strong gradient in average range around the coastline illustrates the continental effect. This is marked on the Kimberley coast of Western Australia, where the range varies from 15°C on the coast to 24°C on the plateau a few kilometres inland.

Extreme temperature range, which is mapped in plate 17, page 47, has been calculated by subtracting the lowest temperature on record for each station from its highest. The greatest absolute range yet recorded is 57.2°C at White Cliffs in north-western New South Wales. This extreme range is confined to an elongated area in far north-western New South Wales, where maxima exceeding 49°C in north-westerly air in summer have been recorded and minima about −8°C during cold southern outbreaks in winter. In general terms the extreme range is about 30°C on the northern coast, 45°C on the southern coasts and 50°C away from the coasts.

Heat waves. Periods with a number of successive days having a temperature higher than 40°C are relatively common in summer over parts of Australia. With the exception of the north-west coast of Western Australia, however, most coastal areas rarely experience more than three successive days of such conditions. The frequency increases inland, and periods of up to ten successive days have been recorded at many inland stations. This figure increases in western Queensland and north-western Western Australia to more than twenty days in places. The central part of the Northern Territory and the Marble Bar-Nullagine area of Western Australia have recorded the most prolonged heat waves.

Heat waves are experienced in the coastal areas from time to time such as during 11–14 January 1939, when a severe heat wave affected south-eastern Australia. During this period Adelaide had a record of 47.6°C on the 12th, Melbourne a record of 45.6°C on the 13th and Sydney a record of 45.3°C on the 14th.

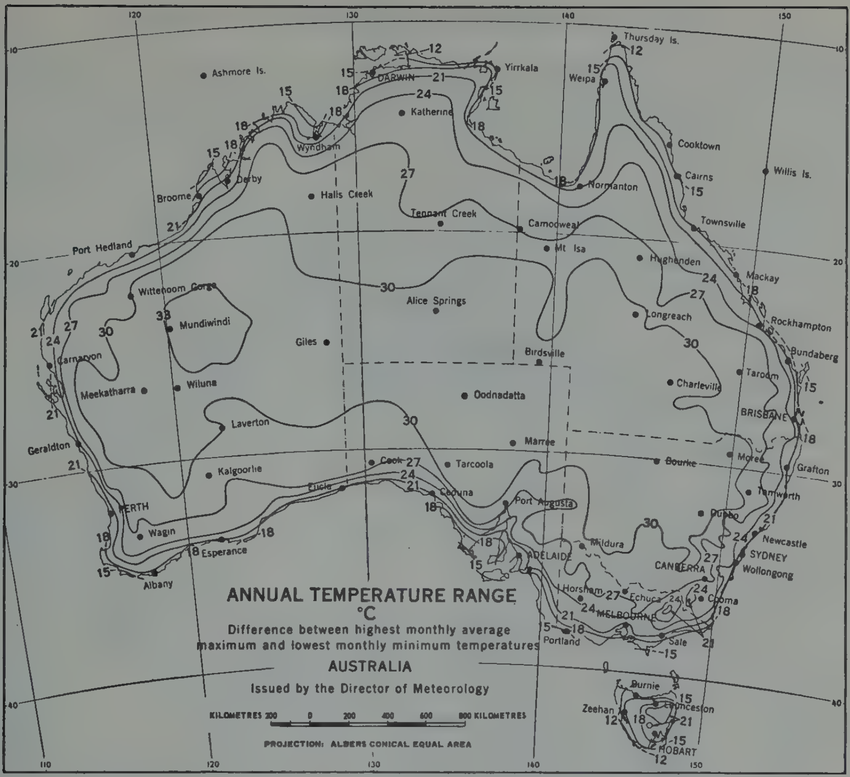
Frost. In Australia frost can cause serious losses in agricultural crops, and numerous climatic studies have been made relating to specific crops cultivated in local areas. Foley (1945 (i)) made a comprehensive study of the incidence of frost at stations recording minimum temperature. Since Foley's work was published the number of stations recording minimum temperatures has increased appreciably.

Under calm conditions, overnight temperatures at ground level are often as much as 5°C lower than those measured in the instrument screen (base height 1.1 metre); differences of 10°C have been recorded. Only a small number of stations measure minima at ground level, the lowest recordings being −15.1°C at Canberra and −14.6°C at Stanthorpe (Queensland). Lower readings may be recorded in alpine areas.

Frost frequency depends on location and orography, and even on minor variations in contour of the land. The parts of Australia which are most subject to frost are the eastern uplands from north-eastern Victoria to the western Darling Downs in southern Queensland. Most stations in this region experience more than ten nights a month with readings of 0°C (or under) for three to five months of the year. On Tasmania's Central Plateau similar conditions occur for three to six months of the year. Frosts may occur within a few miles of the coasts except the Northern Territory coast and most of the north Queensland coast.

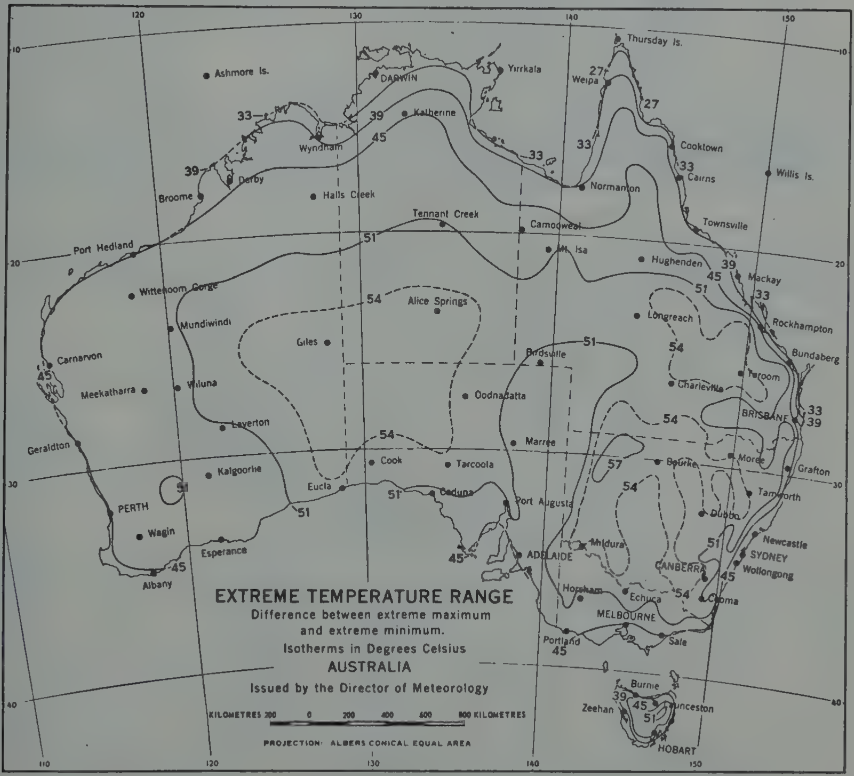
Regions in which frosts may occur at any time of the year comprise most of Tasmania, large areas of the tablelands of New South Wales, much of inland Victoria, particularly the north-east, and a small part of the extreme south-west of Western Australia. Over most of the interior of the continent, and on the highlands of Queensland as far north as the Atherton Plateau, frosts commence in April and end in September. Minimum temperatures below 0°C are experienced in most of the subtropical interior in June and July.

The length of the frost period for the year is taken as the number of days between the first and last recording of an air temperature of 2°C or less. The median duration of the frost period in days per year is shown in plate 18, page 48.



ANNUAL TEMPERATURE RANGE
°C
Difference between highest monthly average maximum and lowest monthly minimum temperatures
AUSTRALIA
Issued by the Director of Meteorology

KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Ashmore Is.
Thursday Is.
Yirrkala
DARWIN
Weipa
Katherine
Wyndham
Cooktown
Derby
Broome
Halls Creek
Normanton
Cairns
Willis Is.
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Charleville
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Geraldton
Cook
Tarcoola
Bourke
Moree
Grafton
Kalgoorlie
Eucla
Ceduna
Port Augusta
Tamworth
PERTH
Dubbo
Wagin
Mildura
Newcastle
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
12
15
18
21
24
27
30
33
110
120
130
140
150
10
20
30
40



EXTREME TEMPERATURE RANGE
Difference between extreme maximum and extreme minimum.
Isotherms in Degrees Celsius
AUSTRALIA
Issued by the Director of Meteorology

KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Ashmore Is.
Thursday Is.
Yirrkala
DARWIN
Weipa
Katherine
Wyndham
Cooktown
Derby
Broome
Halls Creek
Normanton
Cairns
Willis Is.
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Charleville
Meekatharra
Wiluna
Oodnadatta
BRISBANE
Laverton
Marree
Geraldton
Cook
Tarcoola
Bourke
Moree
Grafton
Kalgoorlie
Eucla
Ceduna
Port Augusta
Tamworth
PERTH
Dubbo
Wagin
Mildura
Newcastle
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
27
33
39
45
51
54
57
110
120
130
140
150
10
20
30
40

PLATES 16 and 17

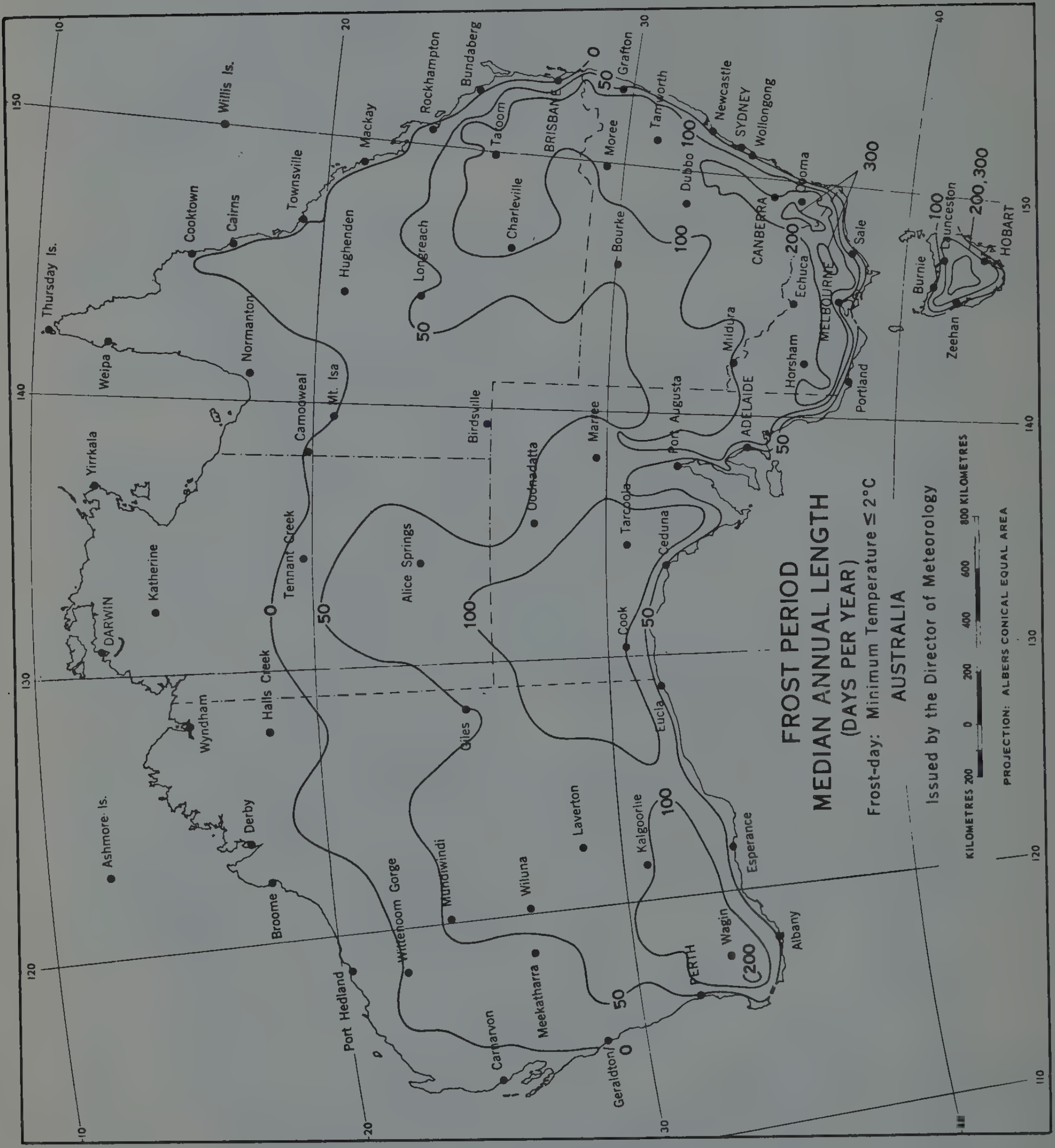

FROST PERIOD
MEDIAN ANNUAL LENGTH
(DAYS PER YEAR)
Frost-day: Minimum Temperature ≤ 2°C
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Willis Is.
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
BRISBANE
Grafton
Taroom
Charleville
Moree
Tamworth
Newcastle
SYDNEY
Wollongong
Dubbo
Bourke
CANBERRA
Cooma
Sale
MELBOURNE
Echuca
Horsham
Portland
Mildura
ADELAIDE
Port Augusta
Burnie
Launceston
HOBART
Zeehan
Weipa
Normanton
Hughenden
Longreach
Mt. Isa
Camooweal
Birdsville
Marree
Oodnadatta
Tarcoola
Ceduna
Cook
Eucla
Yirrkala
DARWIN
Katherine
Tennant Creek
Alice Springs
Halls Creek
Wyndham
Giles
Ashmore Is.
Derby
Broome
Laverton
Kalgoorlie
Esperance
Mundiwindi
Wiluna
Wittenoom Gorge
Port Hedland
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
0
50
100
200
300
200, 300
10
20
30
40
110
120
130
140
150

PLATE 18

The median frost period over the continent varies from over 200 days per year in the south-eastern uplands areas south of the Hunter Valley to zero in northern Australia. In the southern regions of the continent the annual frost period generally decreases from about 100 days inland to below 50 days towards the coast. However, there are appreciable spatial variations depending mainly on local orography. In Tasmania the frost period exceeds 300 days on the uplands and decreases to 100 days near the coast.

The table below includes the average annual frequency of minima of 2°C or less for a wide selection of stations, particularly those prone to frosts. These data show the high spatial variability of frost frequency across Australia. The south-eastern alpine areas, as represented by Kiandra (elevation 1,400 metres), have a frequency exceeding 200. At Kalgoorlie the average annual frequency is 27, at Alice Springs 33, Charleville 37, Canberra 105 and Melbourne 19.

FROST FREQUENCY

Average annual number of frosty nights (screen minimum $\leqslant$2°C) and heavy frosts ($\leqslant$0°C)

Station	*Period of record*	*Altitude (metres)*	*Number of frosty nights*	*Number of heavy frosts*
Adelaide (airport)	1955–70	10	8	1
Alice Springs	1940–71	550	33	11
Ballan (near Ballarat)	1944–64	500	63	20
Birdsville	1957–71	40	7	1
Brisbane (Archerfield airport)	1939–49	10	9	3
Canberra	1939–71	570	105	65
Ceduna	1939–71	20	18	5
Charleville	1942–71	290	37	15
Hobart (Risdon)	1957–70	40	25	5
Kalgoorlie	1939–71	360	27	7
Kiandra	1957–69	1,400	226	176
Loch Valley (E of Melbourne)	1943–59	500	101	53
Melbourne (Essendon airport)	1939–71	80	19	4
Mount Gambier	1942–71	60	33	10
Perth (airport)	1944–71	20	5	0
Walgett	1957–71	130	30	7

The next table shows percentiles (20, 50 and 80) of the annual number of frosts at selected stations. The difference between the 20 and 80 percentile figures relative to the 50 percentile (median) shows that there is great variability in the number of frosts at individual stations from year to year.

FROST VARIABILITY

Annual number of frosty nights ($\leqslant$2°C) and heavy frosts ($\leqslant$0°C) 20, 50 and 80 percentiles

Station	*Period of record*	*Altitude (metres)*	*Number of frosty nights*			*Number of heavy frosts*		
			Percentiles			*Percentiles*		
			20	*50*	*80*	*20*	*50*	*80*
Alice Springs	1941–71	550	16	27	37	5	8	14
Bathurst	1957–71	705	83	101	111	51	69	76
Beechworth (SW of Albury)	1957–71	550	51	58	73	16	22	26
Bridgetown	1957–69	155	30	43	53	7	11	19
Canberra	1939–71	570	87	105	116	48	64	75
Charleville	1943–71	290	21	35	45	6	14	19
Dubbo	1957–71	262	39	43	50	10	14	27
Hay	1957–71	93	21	34	37	5	9	13
Kalgoorlie	1942–71	360	15	22	31	2	4	9
Kiandra	1957–68	1,400	206	228	250	163	175	193
Kyancutta	1957–69	58	31	39	40	7	14	20
Mount Gambier	1942–71	60	20	27	34	3	6	13
Mundiwindi	1957–69	575	8	11	29	2	3	11
Nhill (near Horsham)	1957–71	129	41	47	58	12	17	26
Oatlands	1957–71	435	85	101	111	38	46	57
Omeo	1957–71	660	115	132	138	59	74	83
Richmond (NW of Sydney)	1953–71	20	23	30	40	6	10	13
Sale	1945–71	5	25	34	45	5	11	17
Swansea	1957–71	8	38	45	61	7	13	19
Wandering (SE of Perth)	1957–69	335	41	57	70	13	25	34
Waratah	1957–71	627	104	117	131	35	44	53
Yongala (E of Port Pirie)	1957–69	515	62	75	90	32	39	52

By convention a heavy frost is taken as corresponding to a minimum screen temperature of 0°C or less—see the two previous tables. The regions of mainland Australia most prone to heavy frosts are the eastern uplands and adjacent areas extending from Victoria through New South Wales to south-eastern Queensland. Stations above 1,000 metres in altitude in the southern parts of these uplands have more than 100 heavy frosts annually; and in the upland areas below 1,000 metres the annual frequency ranges from 100 to about 20. Over the remainder of southern Queensland, New South Wales and Victoria, although there are great spatial variations, the average annual frequency of heavy frosts typically ranges from about 20 inland to 10 towards the coasts. Some places on the coast experience heavy frosts, for example Portland, Victoria; with 3 annually.

In Tasmania, uplands above 1,000 metres have more than 100 heavy frosts annually and in neighbouring areas the frequency is about 100 decreasing to 20 towards the coasts. Even some coastal stations have a relatively high frequency, for example Swansea, 13.

The southern half of Western Australia, the whole of South Australia, and the Alice Springs district of the Northern Territory experience heavy frosts. Differences in annual frequencies between places are great but in general the frequency is about 10 inland, decreasing towards the coasts. Some places average more than 20 heavy frosts annually, notably Wandering, Western Australia (21) and Yongala, South Australia (29). At Alice Springs the annual average frequency is 11.

Humidity

Australia is a dry continent in terms of the water vapour content (humidity) of the air. Humidity is measured at Bureau of Meteorology observational stations by dry and wet bulb thermometers mounted in standard instrument screens. These measurements enable moisture content to be expressed in a number of ways two of which are vapour pressure and relative humidity.

Vapour pressure. Vapour pressure is the pressure exerted by the water vapour in the air and, as such, is a measure of the actual amount of water vapour. The amount of water vapour does not normally vary greatly during the day although afternoon sea breezes at coastal stations may bring in moisture to increase the vapour pressure by amounts up to 5 millibars. The 9 a.m. figure may be taken as an approximation to the mean value for the day. The next table page 51, contains average 9 a.m. vapour pressure figures for selected stations. The average annual figures range from 8.2 millibars at Alice Springs to 25.9 millibars at Darwin and 27.6 millibars at Thursday Island. At the high level station Kiandra (1,400 metres) the average annual figure is 7.3 millibars. Excluding values at Kiandra monthly averages range from 6.0 millibars at Alice Springs in August to 31.1 millibars at Darwin in January and at both Darwin and Broome in February.

Vapour pressure in association with air temperature has been used as a measure of climatic discomfort as it affects human beings. Comfortable conditions are generally accepted as being within the vapour pressure range 7–17 millibars, with air temperatures in the range 15–30°C. Above these limits heat discomfort increases and below the limits cold discomfort increases. The wet bulb temperature may also be used as a simple measure of heat discomfort since discomfort increases as the wet bulb temperature rises above 20°C. Climatic discomfort is treated later in this chapter.

Relative humidity. Relative humidity at a given temperature is the ratio (expressed as a percentage) of actual vapour pressure to the saturated vapour pressure at that temperature. The relative humidity at 9 a.m. may be taken as an approximation of the mean relative humidity for the day (24 hours). As a measure of human discomfort this parameter is of limited value because it must be related to the temperature at the time.

The table, on page 51, contains average relative humidity (per cent) at 9 a.m. for selected stations. Average annual figures range from 30 per cent at Mundiwindi to 80 per cent at Thursday Island. Monthly averages range from 17 per cent at Mundiwindi in October to 89 per cent at Katanning in June, July and August and at Kiandra in June. In northern Australia the highest relative humidity occurs in the summer rainy season about February and the lowest in the winter dry season about July. Darwin averages 81 per cent in January and February and 62 per cent in July. In most of southern Australia the highest relative humidity is experienced in the winter rainy season about June or July and the lowest in the warmer months. Perth averages 76 per cent in July and 51 per cent in December, January and February. Over the interior, relative humidity is consistently low although higher averages occur in winter months when temperatures are low. At Alice Springs, October has the lowest average (24 per cent) and June the highest (62 per cent).

The pattern of variation of relative humidity differs from that of vapour pressure, particularly in the south. This is due to the difference in variation of the two parameters with temperature. If the amount of moisture in the air remains constant, vapour pressure decreases slightly with falling temperature, whereas relative humidity increases. Perth for example, has an average 9 a.m. vapour pressure of 14.8 millibars in January and 10.7 millibars in August; and corresponding relative humidity figures are 51 and 71 per cent.

AVERAGE VAPOUR PRESSURE AT 9 A.M.

(mb)

NOTE. The average monthly and annual figures in this and the next table are derived from the average monthly and annual dry and wet bulb temperatures respectively, using psychrometric formulae. Due to the nature of these formulae annual figures so derived may not equal averages of monthly figures.

Station	*Period of record*	*Jan,*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
Adelaide	1868–1971	11.9	12.3	11.7	11.3	10.8	9.9	9.4	9.7	9.9	10.1	10.5	11.1	10.7
Alice Springs	1957–1971	11.9	11.5	10.5	10.1	8.4	7.9	6.5	6.0	6.6	6.8	8.6	9.9	8.2
Armidale	1957–1971	15.1	15.5	14.1	11.7	8.7	7.5	6.3	7.3	8.3	10.1	11.5	13.3	10.2
Brisbane	1887–1950	21.7	22.0	20.9	17.5	14.3	12.1	11.1	11.7	13.8	16.0	18.1	20.1	16.6
Broome	1957–1971	29.4	31.1	29.4	22.4	14.6	14.2	11.8	11.8	15.8	21.7	25.3	28.8	20.8
Canberra	1940–1971	13.1	13.8	12.5	10.3	8.4	7.1	6.6	7.0	8.2	9.7	10.4	11.9	9.9
Carnarvon	1957–1971	21.7	21.9	19.9	16.9	13.8	14.0	11.8	11.6	12.3	13.8	15.9	18.8	15.8
Ceduna	1957–1971	13.8	14.3	14.1	12.0	11.1	9.7	9.4	9.6	10.3	10.3	10.9	12.2	11.1
Charleville	1957–1971	16.7	17.1	15.6	12.5	10.2	9.3	7.8	8.1	8.5	10.5	11.3	14.4	11.3
Cloncurry	1957–1971	19.9	21.2	17.8	13.3	10.4	9.2	7.6	6.9	7.5	9.9	11.8	15.4	12.0
Darwin	1882–1966	31.1	31.1	30.7	27.0	21.8	18.7	17.6	20.6	24.7	27.7	29.3	30.5	25.9
Esperance	1957–1969	16.0	16.7	15.7	14.4	12.7	12.1	11.1	11.1	11.7	12.9	13.9	15.3	13.5
Halls Creek	1957–1971	21.1	21.7	18.5	12.4	10.3	8.2	6.9	6.7	7.5	10.9	13.9	18.0	12.6
Hobart	1894–1970	11.0	11.7	11.0	10.0	8.8	7.9	7.6	7.9	8.3	9.1	9.6	10.6	9.5
Kalgoorlie	1957–1971	12.9	14.0	13.1	11.8	10.3	10.1	8.9	8.8	9.1	9.6	10.5	11.7	10.7
Katanning	1957–1972	13.2	13.9	13.2	12.5	11.0	10.5	9.3	9.7	10.2	9.4	10.6	11.5	11.1
Kiandra	1957–1972	11.1	11.3	10.3	7.6	5.9	5.4	4.7	5.2	5.5	7.3	8.1	10.3	7.3
Marble Bar	1957–1971	20.4	20.8	17.8	12.6	9.5	10.3	7.8	7.6	7.8	9.1	11.0	15.0	11.9
Melbourne	1907–1971	13.1	14.1	13.3	11.7	10.3	9.3	8.9	9.1	9.5	10.5	11.3	12.5	11.1
Mildura	1957–1971	13.6	13.7	13.1	11.7	10.3	9.0	8.7	9.0	9.9	10.4	10.8	11.9	10.8
Mundiwindi	1957–1972	13.1	14.4	11.8	10.6	8.5	8.8	7.2	6.8	6.7	6.4	8.2	10.2	8.9
Perth	1911–1940	14.8	14.7	14.7	13.4	12.4	11.4	10.9	10.7	11.6	11.7	12.7	13.9	12.7
Sydney	1876–1971	18.8	19.2	18.3	15.0	11.9	10.2	9.6	9.5	11.3	13.0	15.0	17.6	13.6
Thursday Island	1957–1971	30.2	30.4	30.3	29.0	28.0	25.8	24.1	24.5	24.7	26.1	28.0	29.6	27.6
Townsville	1957–1971	26.1	27.3	25.4	22.1	18.2	15.3	14.1	15.7	16.7	19.7	22.9	24.6	20.3

AVERAGE RELATIVE HUMIDITY AT 9 A.M.

(per cent)

Station	*Period of record*	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
Adelaide	1868–1971	41	43	47	56	67	75	76	70	60	51	45	40	56
Alice Springs	1957–1971	30	32	35	44	54	62	56	43	33	24	25	27	35
Armidale	1957–1971	63	68	70	73	77	80	74	73	63	56	54	57	66
Brisbane	1887–1971	66	69	71	71	71	72	70	67	63	60	59	61	67
Broome	1957–1971	69	74	69	56	46	52	48	43	46	54	58	64	58
Canberra	1940–1971	58	65	67	73	83	85	83	78	72	66	57	56	69
Carnarvon	1957–1971	62	59	59	59	60	73	68	63	55	53	55	59	61
Ceduna	1957–1971	49	54	60	61	75	77	80	74	63	49	45	48	59
Charleville	1957–1971	47	49	52	52	62	71	65	55	42	38	34	41	48
Cloncurry	1957–1971	48	54	49	42	45	49	43	34	28	27	28	35	40
Darwin	1882–1971	81	81	80	72	65	63	62	66	68	68	70	75	71
Esperance	1957–1969	61	67	66	71	75	82	83	77	71	63	62	62	69
Halls Creek	1957–1971	48	51	44	31	34	33	29	24	20	23	28	38	34
Hobart	1894–1971	58	62	65	70	75	78	78	73	66	62	58	58	67
Kalgoorlie	1957–1971	43	50	52	58	65	75	74	65	55	46	42	42	54
Katanning	1957–1972	58	65	68	78	78	89	89	89	83	54	51	48	69
Kiandra	1957–1972	63	68	72	75	85	89	88	87	71	64	58	64	71
Marble Bar	1957–1971	40	44	38	31	32	43	36	30	24	21	22	28	32
Melbourne	1907–1971	60	63	66	72	79	83	81	75	68	63	60	60	69
Mildura	1957–1971	49	52	59	69	82	87	88	81	69	56	48	48	63
Mundiwindi	1957–1972	28	35	30	35	40	50	46	37	28	17	19	21	30
Perth	1911–1940	51	51	57	61	70	75	76	71	66	60	52	51	62
Sydney	1876–1971	68	70	74	74	75	76	74	68	66	62	62	64	69
Thursday Island	1957–1971	84	86	85	81	82	80	79	79	75	73	73	77	80
Townsville	1957–1971	69	75	73	68	66	66	64	63	56	58	62	64	65

Sunshine, cloud and fog

Sunshine. Sunshine as treated here refers to bright or direct sunshine. Australia receives relatively large amounts of sunshine although seasonal cloud formations have a notable effect on its spatial and temporal distribution. Cloud cover reduces both incoming and outgoing radiation and thus affects sunshine, air temperature and other climatic elements at the earth's surface. Sunshine amounts at Australian capitals are included in the climatic tables, pages 63–70.

Average daily sunshine (hours) in January and July based on all available data to August 1974, is shown in plates 19 and 20, page 53. In areas where there is a sparsity of data, estimates of sunshine derived from cloud data were used. Most of the continent receives more than 3,000 hours of sunshine a year, or nearly 70 per cent of the total possible and in central Australia and the mid-west coast of Western Australia totals slightly in excess of 3,500 hours occur. Totals of less than 1,750 hours occur on the west coast and highlands of Tasmania; this amount is only 40 per cent of the total possible per year (about 4,380 hours).

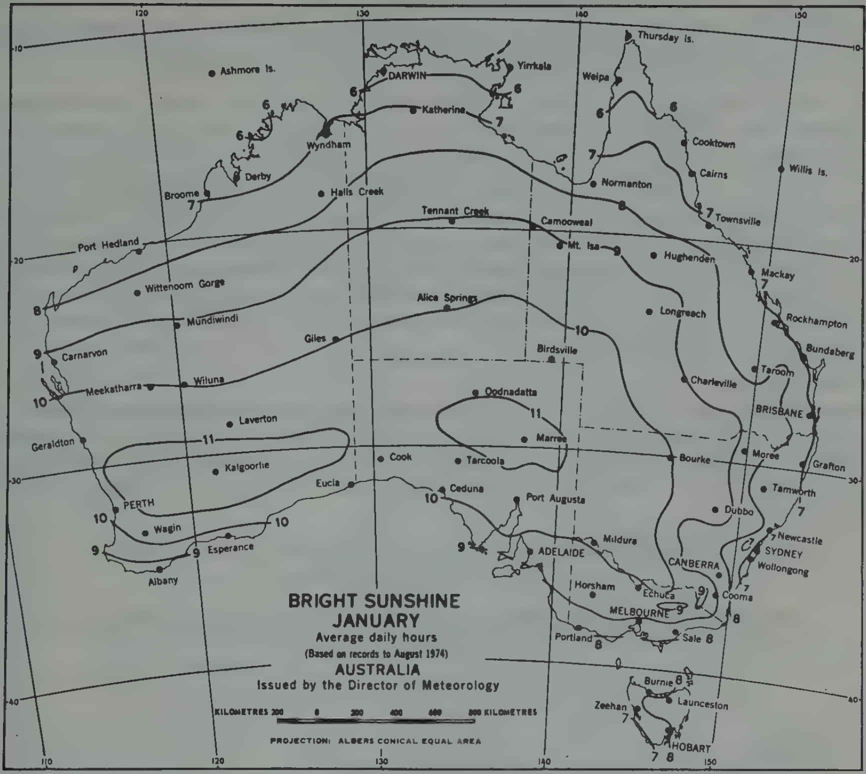
In southern Australia generally the duration of sunshine is greatest about December when the sun is at its highest elevation and lowest in June when the sun is lowest. In northern Australia sunshine is generally greatest about August-October prior to the wet season and least about January-March during the wet season. The table gives the 20, 50 and 80 percentiles of daily bright sunshine for the months of June and December at selected stations. These values give an indication of the variability of daily sunshine hours. Perth for example, has a high variability of daily sunshine hours in the wet month of June (160 per cent) and a low variability in the dry month of December (30 per cent). Darwin has a low variability in the dry season month of June (15 per cent) and a high variability in the wet season month of December (85 per cent).

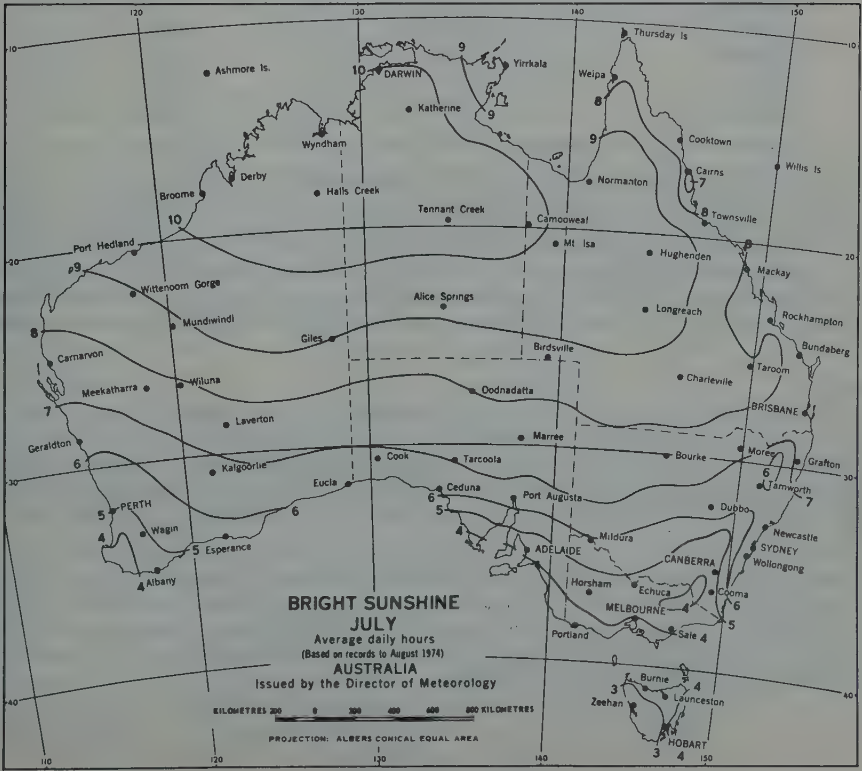
BRIGHT SUNSHINE, VARIABILITY OF DAILY HOURS, JUNE AND DECEMBER

(20, 50 and 80 percentile values)

Station	*Period of record*	*June*			*December*		
		Percentile			*Percentile*		
		20	*50*	*80*	*20*	*50*	*80*
Adelaide . . .	1955–71	1.0	3.5	7.5	4.0	9.0	12.5
Alice Springs . .	1954–71	5.5	9.5	10.0	6.5	11.0	12.5
Brisbane . . .	1951–71	2.5	8.0	9.5	4.0	8.5	11.5
Canberra . . .	1957–71	2.0	5.0	7.0	4.0	9.5	12.0
Darwin . . .	1951–71	9.0	10.0	10.5	3.5	7.5	10.0
Hobart	1955–71	0.5	3.0	6.0	2.5	7.0	10.5
Melbourne . . .	1955–70	0.5	2.5	6.0	3.0	7.5	11.5
Perth	1945–71	1.0	4.0	7.5	8.5	11.0	12.0
Sydney	1955–71	0.5	6.0	8.0	1.5	7.5	11.0
Townsville . . .	1957–71	4.5	9.0	10.0	5.0	9.5	11.0

Cloud. Seasonal changes in cloudiness vary with the distribution of rainfall. In the southern parts of the continent, particularly in the coastal and low lying areas, the winter months are generally more cloudy than the summer months. This is due to the formation of extensive areas of stratiform cloud and fog during the colder months, when the structure of the lower layers of the atmosphere favours the physical processes resulting in this type of cloud. Particularly strong seasonal variability of cloud cover exists in northern Australia where skies are clouded during the summer wet season and mainly cloudless during the winter dry season. Cloud coverage is greater near coasts and on the windward slopes of the eastern uplands of Australia and less over the dry interior.


BRIGHT SUNSHINE
JANUARY
Average daily hours
(Based on records to August 1974)
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
110
120
130
140
150
10
20
30
40
Thursday Is.
Ashmore Is.
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Cooktown
Cairns
Willis Is.
Normanton
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt. Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Meekatharra
Wiluna
Charleville
Oodnadatta
BRISBANE
Laverton
Marree
Moree
Geraldton
Kalgoorlie
Cook
Tarcoola
Bourke
Grafton
Eucla
Ceduna
Tamworth
PERTH
Port Augusta
Dubbo
Wagin
Esperance
Mildura
Newcastle
SYDNEY
ADELAIDE
Wollongong
CANBERRA
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
6
7
8
9
10
11


BRIGHT SUNSHINE
JULY
Average daily hours
(Based on records to August 1974)
AUSTRALIA
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
110
120
130
140
150
10
20
30
40
Thursday Is
Ashmore Is.
DARWIN
Yirrkala
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Cooktown
Cairns
Willis Is
Normanton
Tennant Creek
Camooweal
Townsville
Port Hedland
Mt Isa
Hughenden
Mackay
Wittenoom Gorge
Alice Springs
Longreach
Rockhampton
Mundiwindi
Giles
Birdsville
Bundaberg
Carnarvon
Taroom
Meekatharra
Wiluna
Charleville
Oodnadatta
BRISBANE
Laverton
Marree
Moree
Geraldton
Kalgoorlie
Cook
Tarcoola
Bourke
Grafton
Eucla
Ceduna
Tamworth
PERTH
Port Augusta
Dubbo
Wagin
Esperance
Mildura
Newcastle
SYDNEY
ADELAIDE
Wollongong
CANBERRA
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Launceston
Zeehan
HOBART
3
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5
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7
8
9
10

PLATES 19 and 20

The average monthly cloud amounts at Australian capitals are included in the climatic tables, pages 63–70. Darwin has the least average daily coverage of 3.2 eighths and Hobart the highest daily average of 5.0 eighths. The highest daily average for any month occurs at Darwin (5.9 eighths for January) and the lowest average daily is also at Darwin (1.1 eighths for August).

Fog. The formation of fog depends on the occurrence of favourable meteorological elements—mainly temperature, humidity, wind and cloud cover. The nature of the local terrain is important for the development of fog and there is a tendency for this phenomenon to persist in valleys and hollows. The incidence of fog may vary significantly over distances as short as one kilometre.

Fog in Australia tends to be greater in the south than the north, although parts of the east coastal areas are relatively fog prone even in the tropics. Incidence is much greater in the colder months, particularly in the eastern uplands. Fog may persist during the day but rarely until the afternoon over the interior. The highest fog incidence at a capital city is at Canberra which has an average of 46 days per year on which fog occurs, 28 of which are in the period May to August. Brisbane averages 22 days of fog per year, 17 of which occur between April and September. Darwin averages only 3 days per year, June to September.

Global radiation

Global (short wave) radiation includes that radiation energy reaching the ground directly from the sun and that received indirectly from the sky, scattered downwards by clouds, dust particles, etc.

Plates 21 and 22, page 55, shows the average global radiation for the months of January and July. The table below shows the variability of daily global radiation for June and December (1968–72) at selected stations.

GLOBAL RADIATION: VARIABILITY OF DAILY AMOUNTS FOR JUNE AND DECEMBER

($mWh.cm^{-2}$)

(20, 50 and 80 percentile values in milliwatt hours per square centimetre (1964–68))

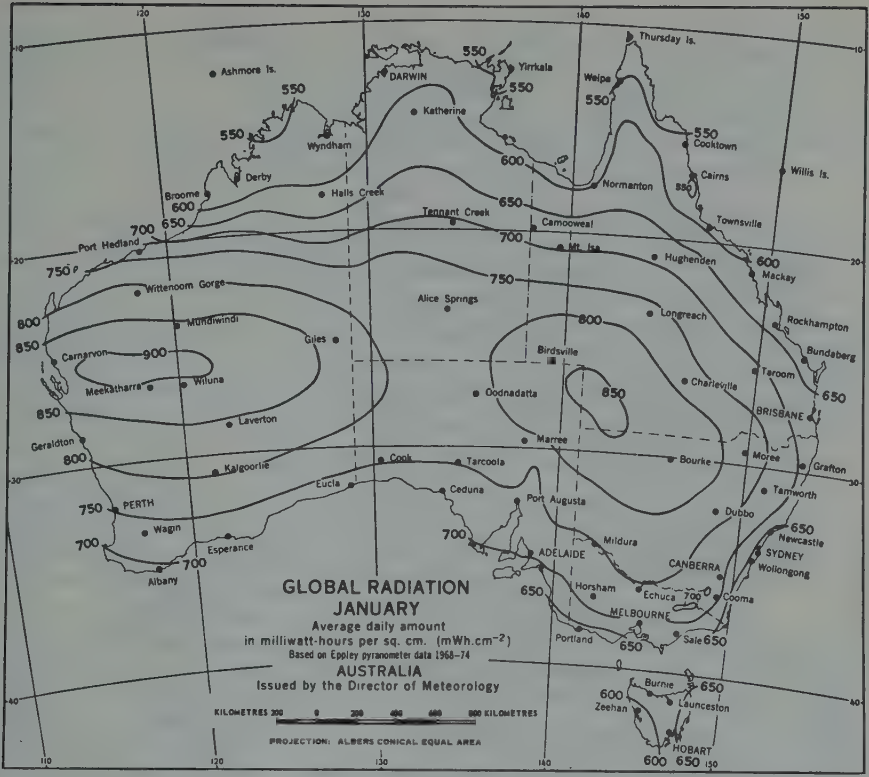
	June			*December*		
	Percentiles			*Percentiles*		
Station	*20*	*50*	*80*	*20*	*50*	*80*
Alice Springs	360	450	480	580	760	810
Darwin	520	570	590	440	570	620
Melbourne	130	190	240	470	640	780
Perth	180	260	330	770	870	910
Townsville	360	490	510	550	710	760
Williamtown	210	270	330	490	650	780

A high correlation exists between daily global radiation (plates 21 and 22, page 55) and daily hours of sunshine (plates 19 and 20, page 53). On the north-west-coast around Port Hedland, where average daily global radiation is the highest for Australia (640 milliwatt hours), average daily sunshine is also highest, being approximately 10 hours. Sunshine is more dependent on variations in cloud coverage than is global radiation, since the latter includes diffuse radiation from the sky as well as direct radiation from the sun. An example is Darwin where in the dry month of July sunshine approaches twice that of the wet (cloudy) month of January but global radiation figures for the two months are comparable.

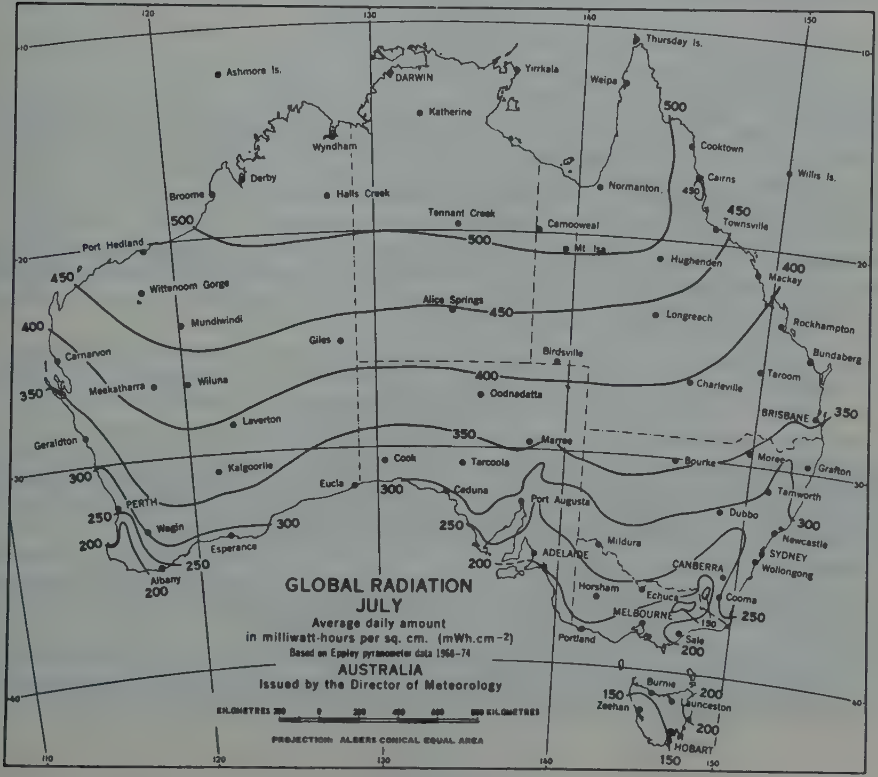
Evaporation

Evaporation is determined by measuring the amount of water evaporated from a free water surface exposed in a pan. Evaporation from a free water surface depends on a number of climatic elements, mainly temperature, humidity and wind. Evaporation data are useful in water conservation studies and in estimating potential evapotranspiration for irrigation and plant growth studies. In Australia, where surface water storage is vital over large areas, evaporation is a highly significant element.

Average annual Class A pan evaporation is mapped in plate 23, page 56 which shows a variation from 900 millimetres in southwest Tasmania to 4,500 millimetres in the dry interior of Western Australia with about 75 per cent of the continent exceeding 2,500 millimetres. In about 75 per cent of the continent, comprising most inland areas, rainfall does not exceed evaporation loss from a free water surface in any month of the year. In the central and north-west parts of the continent the annual evaporation exceeds ten times the rainfall.


Ashmore Is.
DARWIN
Yirrkala
Thursday Is.
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Tennant Creek
Camooweal
Mt. Isa
Normanton
Cooktown
Cairns
Willis Is.
Townsville
Hughenden
Mackay
Port Hedland
Wittenoom Gorge
Mundiwindi
Alice Springs
Longreach
Rockhampton
Bundaberg
Carnarvon
Giles
Birdsville
Meekatharra
Wiluna
Oodnadatta
Charleville
Taroom
BRISBANE
Laverton
Geraldton
Marree
Moree
Kalgoorlie
Cook
Tarcoola
Bourke
Grafton
Eucla
Ceduna
Tamworth
Port Augusta
PERTH
Dubbo
Wagin
Mildura
Newcastle
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
550
600
650
700
750
800
850
900
120
130
140
150
110
10
20
30
40
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA

GLOBAL RADIATION
JANUARY
Average daily amount
in milliwatt-hours per sq. cm. (mWh.cm^{-2})
Based on Eppley pyranometer data 1968–74
AUSTRALIA
Issued by the Director of Meteorology


Ashmore Is.
DARWIN
Yirrkala
Thursday Is.
Weipa
Katherine
Wyndham
Derby
Broome
Halls Creek
Tennant Creek
Camooweal
Mt. Isa
Normanton
Cooktown
Cairns
Willis Is.
Townsville
Hughenden
Mackay
Port Hedland
Wittenoom Gorge
Mundiwindi
Alice Springs
Longreach
Rockhampton
Bundaberg
Carnarvon
Giles
Birdsville
Meekatharra
Wiluna
Oodnadatta
Charleville
Taroom
BRISBANE
Laverton
Geraldton
Marree
Moree
Kalgoorlie
Cook
Tarcoola
Bourke
Grafton
Eucla
Ceduna
Tamworth
Port Augusta
PERTH
Dubbo
Wagin
Mildura
Newcastle
Esperance
ADELAIDE
SYDNEY
CANBERRA
Wollongong
Albany
Horsham
Echuca
Cooma
MELBOURNE
Portland
Sale
Burnie
Zeehan
Launceston
HOBART
150
200
250
300
350
400
450
500
120
130
140
150
110
10
20
30
40
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA

GLOBAL RADIATION
JULY
Average daily amount
in milliwatt-hours per sq. cm. (mWh.cm^{-2})
Based on Eppley pyranometer data 1968–74
AUSTRALIA
Issued by the Director of Meteorology

PLATES 21 and 22

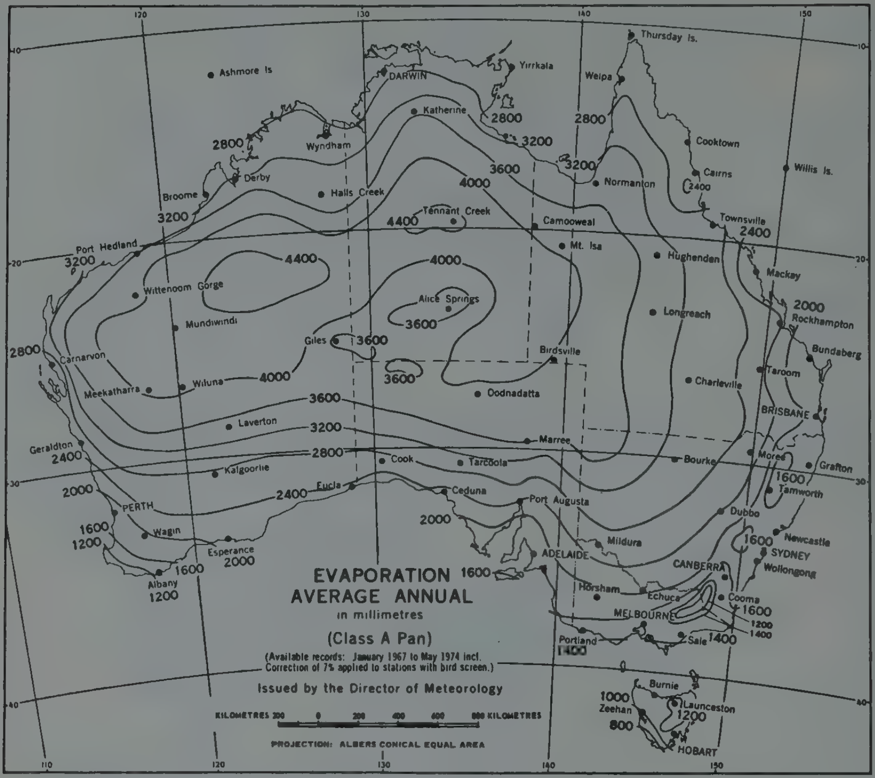

EVAPORATION
AVERAGE ANNUAL
in millimetres
(Class A Pan)
(Available records: January 1967 to May 1974 incl.
Correction of 7% applied to stations with bird screen.)
Issued by the Director of Meteorology
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
110
120
130
140
150
10
20
30
40
Thursday Is.
Ashmore Is
DARWIN
Yirrkala
Weipa
Katherine
2800
2800
Wyndham
3200
3200
Cooktown
2800
Derby
3600
Normanton
Cairns
2400
Willis Is.
Broome
Halls Creek
4000
3200
4400
Tennant Creek
Camooweal
Townsville
2400
Port Hedland
3200
Mt. Isa
Hughenden
4400
4000
Mackay
Wittenoom Gorge
Alice Springs
2000
Rockhampton
Mundiwindi
3600
Longreach
Giles
3600
Bundaberg
2800
Carnarvon
Birdsville
Taroom
3600
Wiluna
4000
Meekatharra
Oodnadatta
Charleville
3600
BRISBANE
Laverton
3200
Marree
Geraldton
2400
2800
Cook
Tarcoola
Bourke
Moree
Grafton
Kalgoorlie
1600
Tamworth
2000
2400
Eucla
Ceduna
Port Augusta
PERTH
Dubbo
2000
1600
1200
Wagin
Mildura
1600
Newcastle
Esperance
2000
ADELAIDE
SYDNEY
1600
CANBERRA
Wollongong
Albany
1200
1600
Horsham
Echuca
Cooma
1600
MELBOURNE
1200
1400
Portland
1400
Sale
1400
Burnie
1000
Zeehan
800
Launceston
1200
HOBART

PLATE 23

Winds

The mid-latitude anticyclones are the chief determinants of Australia's two main prevailing wind streams. In relation to the west-east axes of the anticyclones these streams are easterly to the north and westerly to the south. The cycles of development, motion and decay of low pressure systems to the north and south of the anticyclones result in diversity of wind flow patterns. Wind variations are greatest around the coasts where diurnal land and sea breeze effects are important.

Orography affects the prevailing wind pattern in various ways such as the channelling of winds through valleys, deflection by mountains and cold air drainage from highland areas. An example of this channelling is the high frequency of north-west winds at Hobart caused by the north-west south-east orientation of the Derwent River Valley.

Average wind speeds and prevailing directions at Australian capitals are included in the climatic tables, pages 63–70. Perth is the windiest capital with an average wind speed of 15.6 kilometres per hour; Canberra is the least windy with an average speed of 5.8 kilometres per hour.

The highest wind speeds and wind gusts recorded in Australia have been associated with tropical cyclones. The highest recorded gust was 246 kilometres per hour during a cyclone at Onslow, Western Australia in 1975 and gusts reaching 200 kilometres per hour have been recorded on several occasions in northern Australia with cyclone visitations. The highest gusts recorded at Australian capitals were 217 kilometres per hour at Darwin and 156 kilometres per hour at Perth.

Estimates of the extreme wind gust expected in a given return period* have been derived for places throughout Australia (Whittingham, 1964). On this basis, for example, Darwin would have an extreme gust for a return period of 10 years of 140 kilometres per hour, Melbourne 135 and Perth 130.

---

*Return period is the average period between successive occurrences equal to, or greater than, a given speed. For example the extreme wind gust for a return period of 10 years can be expected to occur once in 10 years on the average.

Floods

Widespread flood rainfall may occur anywhere in Australia but has a higher incidence in the north and in the eastern coastal areas. It is most economically damaging along the shorter streams flowing from the eastern uplands eastward to the seaboard of Queensland and New South Wales. These flood rains are notably destructive in the more densely populated coastal river valleys of New South Wales—the Tweed, Richmond, Clarence, Macleay, Hunter and Nepean-Hawkesbury—all of which experience relatively frequent flooding. Although chiefly summer rains, they may occur in any season.

The great Fitzroy and Burdekin river basins of Queensland receive flood rains during the summer wet season. Much of the run-off due to heavy rain in north Queensland west of the eastern uplands flows southward through the normally dry channels of the network of rivers draining the interior lowlands into Lake Eyre. This widespread rain may cause floods over an extensive area, but it soon seeps away or evaporates, occasionally reaching the lake in quantity. The Condamine and other northern tributaries of the Darling also carry large volumes of water from flood rains south through western New South Wales to the Murray and flooding occurs along their courses at times.

Flood rains occur at irregular intervals in the Murray-Murrumbidgee system of New South Wales and Victoria, the coastal streams of southern Victoria and the north coast streams of Tasmania.

Droughts

Drought in general terms refers to an acute water shortage. This is normally due to rainfall deficiency but with other parameters contributing to the actual water availability. The best single measure of water availability in Australia is rainfall, although parameters such as evaporation and soil moisture are significant, or even dominant, in some situations.

Droughts have severe economic effects in Australia and during the years 1864–1973 inclusive there have been at least eight major droughts affecting the greater part of Australia and at least seven other droughts of lesser severity affecting extensive areas (Foley 1957 (ii)). The droughts of 1895–1903 and 1958–68 were probably the most disastrous in their effects on primary industry.

Gibbs and Maher (1967), having defined a drought year at a certain station as one with the year's rainfall in the first decile range, concluded that the occurrence of areas in the first decile range on annual decile maps for the period 1885–1965 corresponded rather well with drought areas discussed by Foley (1957).

One method of assessing the incidence of rainfall deficiency is the analysis of the distribution of annual rainfalls less than the median (Gaffney 1975). The range between the 50 percentile (median) and the 10 percentile gives a measure of the variation in magnitude of annual rainfalls less than the median. The ratio of this range to the 30 percentile value may be used as an index of rainfall deficiency incidence or drought incidence, i.e.:

$$\text{Index of drought incidence} = \left\{\frac{50 - 10}{30}\right\} \text{percentile}$$

For example, the indexes for Onslow (north-west coast of Western Australia) and similarly, for Cape Otway (south coast of Victoria) are derived thus:

$$\text{Index for Onslow} = \left\{\frac{222 - 64}{145}\right\} \text{mm} = 1.09$$

$$\text{Index for Cape Otway} = \left\{\frac{865 - 716}{801}\right\} \text{mm} = 0.19$$

Plate 24, page 58 shows the distribution of the index of drought incidence over Australia. The intrusions of high index values from the interior to the central cost of Queensland and across western New South Wales are noteworthy. The extreme values on the north-west coast of Western Australia are among the highest in Australia (e.g. Onslow 1.09) due to the dependence of the rainfall on random cyclone tracks.

The Bureau of Meteorology commenced the issue of *Drought Reviews* in June 1965. These seviews provide a summary of serious rainfall deficiencies and are issued monthly when serious or revere deficiencies exist in any of the rainfall districts. The deficiency criteria are based on monthly rainfall decile analyses. A review of droughts in Australia to 1968 is included in Year Book No. 54, 1968. Summaries of subsequent drought periods may be obtained from the Drought Reviews.

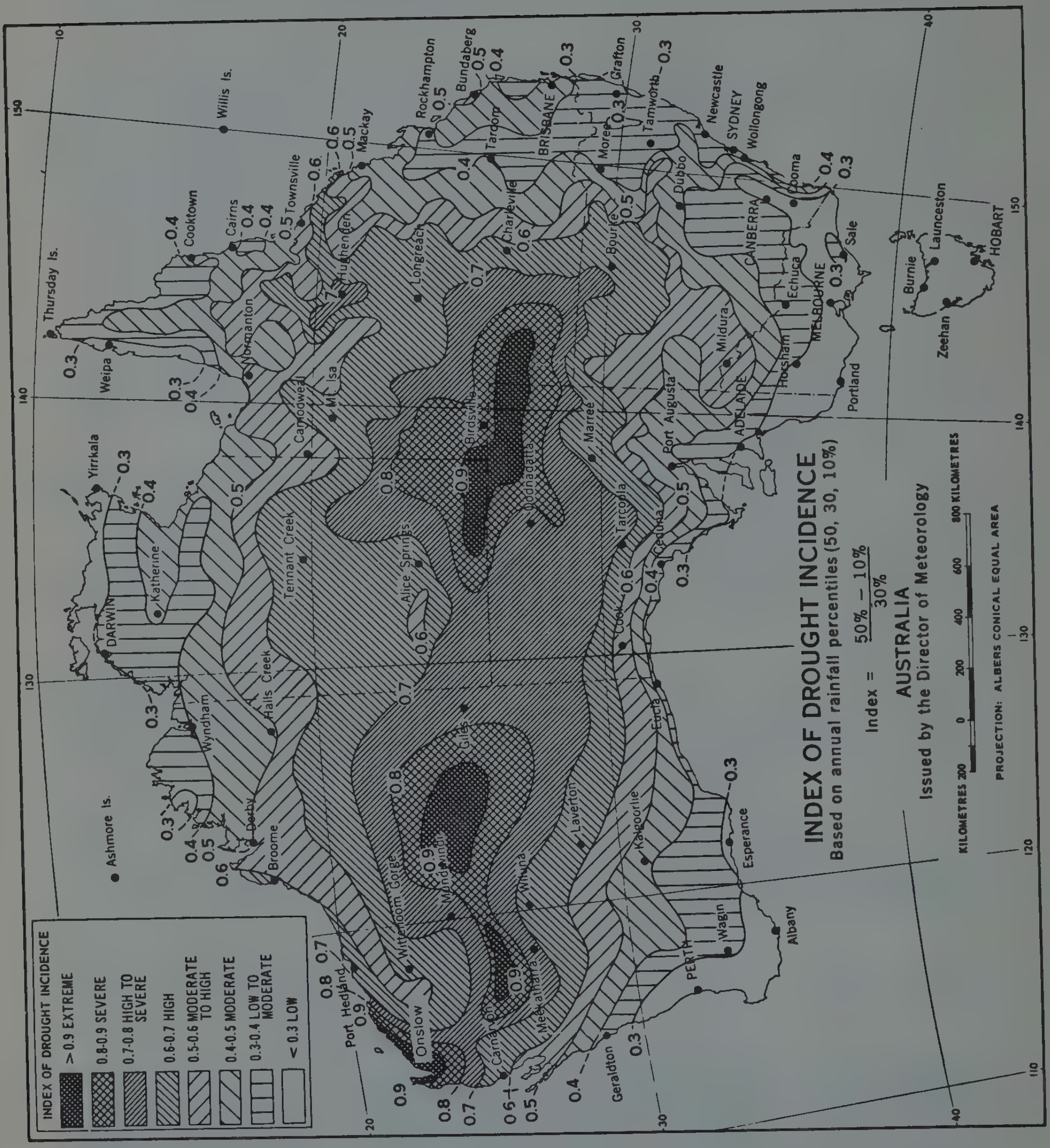

INDEX OF DROUGHT INCIDENCE
Based on annual rainfall percentiles (50, 30, 10%)
Index = (50% − 10%)/30%
AUSTRALIA
Issued by the Director of Meteorology
INDEX OF DROUGHT INCIDENCE
> 0.9 EXTREME
0.8-0.9 SEVERE
0.7-0.8 HIGH TO SEVERE
0.6-0.7 HIGH
0.5-0.6 MODERATE TO HIGH
0.4-0.5 MODERATE
0.3-0.4 LOW TO MODERATE
< 0.3 LOW
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Willis Is.
Ashmore Is.
Weipa
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
BRISBANE
Grafton
Tamworth
Newcastle
SYDNEY
Wollongong
CANBERRA
Cooma
Sale
MELBOURNE
Echuca
Horsham
Portland
Mildura
ADELAIDE
Port Augusta
Launceston
Burnie
Zeehan
HOBART
Yirrkala
DARWIN
Katherine
Normanton
Hughenden
Longreach
Tarcom
Charleville
Moree
Bourke
Dubbo
Camooweal
Mt Isa
Birdsville
Marree
Oodnadatta
Tennant Creek
Alice Springs
Tarcoola
Ceduna
Cook
Eucla
Halls Creek
Wyndham
Derby
Broome
Giles
Laverton
Kalgoorlie
Esperance
Albany
Wagin
PERTH
Geraldton
Meekatharra
Wiluna
Mundiwindi
Wittenoom Gorge
Port Hedland
Onslow
Carnarvon
10
20
30
40
110
120
130
140
150

PLATE 24

Climatic discomfort

In Australia climatic discomfort is significant in most areas. During the summer half of the year (November–April) prolonged high temperatures and humidity around the northern coasts and high temperatures over the inland cause physical stress. In winter, low temperatures and strong cold winds over the interior and southern areas can be severe for relatively short periods. However, cold stress does not cause prolonged physical hardship in Australia at altitudes lower than 1,000 metres, that is, over more than 99 per cent of the continent.

The climatic variables determining physical discomfort are primarily air temperature, vapour pressure and wind. The complete assessment of physical discomfort also requires analyses of such parameters as thermal conductivity of clothing, vapour pressure at the skin and the metabolic heat rate arising from activity of the human body. The cooling system of the human body depends on evaporation of moisture to keep body temperature from rising to lethal levels as air temperature rises. Defining criteria of discomfort is difficult because personal reactions to the weather differ greatly according to a number of variables including health, age, clothing, occupation and acclimatisation (Ashton 1964). However, climatic strain has been measured experimentally and discomfort indexes based on the average response of subjects under specified conditions have been derived.

Effective Temperature. The effective temperature with respect to any environmental combination of temperature, humidity and wind is defined as the temperature of still, saturated air in which a normally clothed sedentary worker would feel the same level of comfort or discomfort.

Environment studies carried out at the research laboratories of the American Society of Heating, Refrigerating and Air Conditioning Engineers established values of effective temperature corresponding to various combinations of temperature, humidity and air movement. The results were published as a series of research reports commencing in 1923, and have been widely used to measure climatic discomfort (*see* 1960 report of the Society).

Normally clothed sedentary workers are mostly comfortable within a range of effective temperatures between 15°C and 27°C (air movement 5–8 metres per minute). At effective temperatures greater than 27°C, the majority of people feel heat discomfort and when less than 15°C they feel cold discomfort.

The table below contains the annual average frequency of effective temperature at 3 p.m. within specified limits at selected stations. The figures provide comparisons of daily occurrence of afternoon discomfort for the given environmental conditions.

CLIMATIC DISCOMFORT: EFFECTIVE TEMPERATURE

Annual average frequency of days when effective temperature at 3 p.m. is lower than 15°C (cold discomfort), within 15–27°C (comfort), and higher than 27°C (heat discomfort). Indoors, normally clothed sedentary workers, air movement 5–8 metres per minute.

Station	*Period of record*	*Average days per year*		
		Less than 15°C	*15–27°C*	*Greater than 27°C*
Adelaide	1955–72	128	234	3
Albury	1962–71	141	220	4
Alice Springs	1955–67	39	300	26
Brisbane	1951–70	6	356	3
Broome	1941–71	0	225	140
Canberra	1940–72	172	192	1
Carnarvon	1945–72	1	345	19
Ceduna	1955–71	77	279	9
Charleville	1942–72	28	316	21
Cloncurry	1940–72	1	268	96
Darwin	1955–69	0	225	140
Hobart	1944–67	239	126	0
Kalgoorlie	1940–72	66	281	18
Marble Bar	1957–71	0	220	145
Melbourne	1955–71	155	207	3
Mildura	1946–72	95	258	12
Perth	1944–71	57	302	6
Rockhampton	1940–72	2	337	26
Sydney	1955–72	69	295	1
Townsville	1941–69	0	333	32
Woomera	1954–72	73	279	13

Heat discomfort is greatest in the north-west, where Marble Bar averages 145 days of high heat discomfort annually; and least in the south-east, where Hobart has only one day every five years. Cold discomfort is least in the north, where Townsville has one day of cold discomfort in ten years; it is greatest in the south-east, where Hobart has 239 days annually when the effective temperature is sufficiently low to cause discomfort. By the suitable choice of clothing discomfort can be decreased significantly on cold days. On cold days also, workers tend to take opportunities to move around, thus increasing metabolic heat rates.

Effective temperature is a useful index but its application is limited because available criteria relate only to indoor workers in sedentary occupations. Furthermore, at lower air temperatures the effective temperature gives excessive weight to humidity.

Relative strain index. The relative strain index derived by Lee and Henschel (1963) has been applied in Australia to measure heat discomfort (Hounam, 1969, Gaffney 1973). The results obtained with Australian data are useful for purposes of comparison but interpretation of the actual results is tentative until empirical environmental studies are carried out in this region. In addition to temperature, humidity and air movement the relative strain index has facilities for incorporation of metabolic heat rate, net radiation and insulation of clothing. It has the advantage of being applicable to manual workers under shelter and expending energy at various metabolic heat rates.

The discomfort map plate 25, page 61 shows the average number of days per year when the relative strain index exceeds 0.3 discomfort level at 3 p.m. assuming standard conditions as defined. Maximum discomfort generally occurs around 3 p.m. on days of high temperature.

A notable feature is the lower frequency of days of discomfort in Queensland coastal areas in comparison with the northern coastal areas of Western Australia. This is due to the onshore winds prevailing on the Queensland coast and the cooling effect of the adjacent eastern uplands. Lower frequencies on the Atherton Plateau in the tropics near Cairns show the advantage of altitude. Relatively low heat discomfort frequencies are evident in upland and coastal areas of south-east Australia. Tasmania is entirely in the zone of least discomfort experiencing on the average less than one day of heat discomfort per year. In Western Australia most of the Kimberley region in the north lies in the highest discomfort zone with the frequencies decreasing southwards to a strip of lowest discomfort towards the south-west coast. A steep gradient of discomfort frequency on the west coast shows the moderating effect of sea breezes.

The average annual frequency of days when the relative strain index at 3 p.m. exceeds specified discomfort levels is shown in the table below. The Sydney frequencies were derived from observations at the Regional Office of the Bureau of Meteorology, which is representative of eastern coastal suburbs; frequencies are higher in western suburbs. The Melbourne frequencies were derived from observations at the Bureau's Regional Office, which may be taken as fairly representative of inner northern and eastern suburbs; frequencies are lower in bayside suburbs. Similarly in other capital city areas significant variations occur with distance from the coast, for example, at Perth.

HEAT DISCOMFORT

Average number of days per year when relative strain index (RSI) at 3 p.m. exceeds 0.3 (discomfort) and 0.4 (high discomfort) under standard conditions (indoors, manual activities, light clothing, air movement 60 metres per minute).

Station	*Period of record*	*Greater than*	
		0.3 RSI	*0.4 RSI*
Adelaide	1955–72	7	1
Albury	1962–71	8	1
Alice Springs	1955–67	50	4
Brisbane	1951–69	6	<1
Broome	1940–72	155	48
Canberra	1940–72	2	<1
Carnarvon	1945–72	23	3
Ceduna	1955–71	16	3
Charleville	1942–72	42	3
Cloncurry	1940–72	126	28
Darwin	1955–69	165	23
Hobart	1944–67	<1	<1
Kalgoorlie	1939–72	30	5
Marble Bar	1957–71	173	69
Melbourne	1955–71	6	1
Mildura	1946–72	19	3
Perth	1944–72	12	1
Rockhampton	1940–72	33	5
Sydney	1955–72	2	<1
Townsville	1941–69	36	4
Woomera	1954–72	25	3

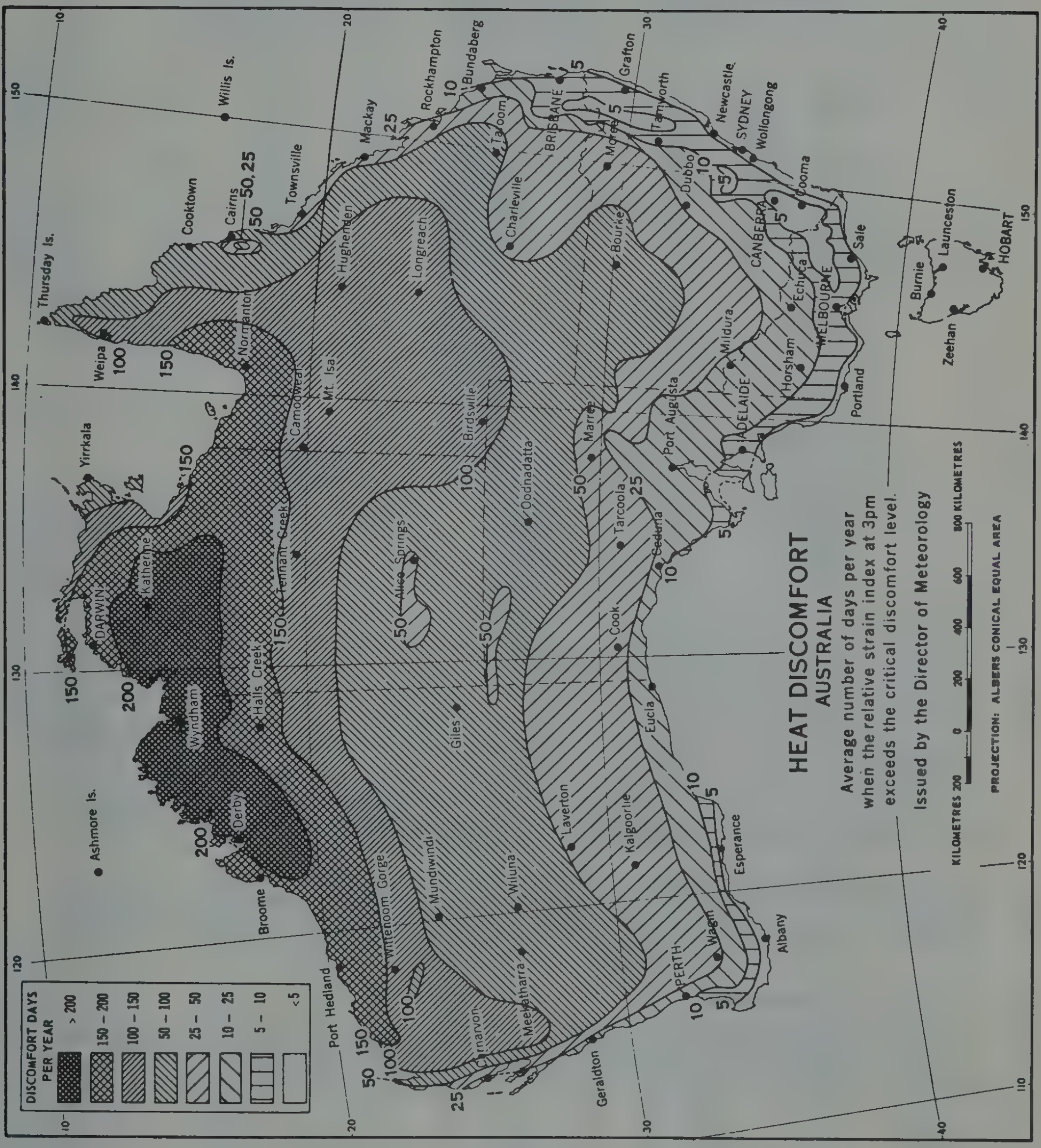

HEAT DISCOMFORT
AUSTRALIA
Average number of days per year when the relative strain index at 3pm exceeds the critical discomfort level.
Issued by the Director of Meteorology
DISCOMFORT DAYS PER YEAR
> 200
150 – 200
100 – 150
50 – 100
25 – 50
10 – 25
5 – 10
<5
KILOMETRES 200 0 200 400 600 800 KILOMETRES
PROJECTION: ALBERS CONICAL EQUAL AREA
Thursday Is.
Willis Is.
Weipa
Cooktown
Cairns
Townsville
Mackay
Rockhampton
Bundaberg
Taroom
BRISBANE
Grafton
Moree
Tamworth
Newcastle
SYDNEY
Wollongong
Dubbo
CANBERRA
Cooma
Sale
MELBOURNE
Echuca
Mildura
Horsham
Portland
ADELAIDE
Port Augusta
Marree
Bourke
Charleville
Longreach
Hughenden
Normanton
Mt. Isa
Camooweal
Birdsville
Oodnadatta
Tarcoola
Ceduna
Cook
Eucla
Alice Springs
Giles
Tennant Creek
Yirrkala
DARWIN
Katherine
Halls Creek
Wyndham
Derby
Broome
Ashmore Is.
Port Hedland
Wittenoom Gorge
Mundiwindi
Wiluna
Meekatharra
Carnarvon
Geraldton
PERTH
Wagin
Albany
Esperance
Kalgoorlie
Laverton
Burnie
Launceston
Zeehan
HOBART
200
150
100
50
25
10
5
50, 25
10
20
30
40
110
120
130
140
150

PLATE 25

The variability of the relative strain index in January by percentiles for 3 p.m. values at selected stations is shown in the table below. Melbourne has a significantly higher discomfort variability than Sydney, and Adelaide is more variable than Brisbane.

HEAT DISCOMFORT VARIABILITY, JANUARY

Relative strain index values at 3 p.m. not exceeded by 20, 50 and 80 per cent of all values. Indoors, lightly clothed manual workers, air movement 60 metres per minute.

Station	*Period of record*	*Percentiles* *20*	*50*	*80*
Adelaide	1955–72	<0.10	0.10	0.25
Albury	1962–71	0.10	0.15	0.25
Alice Springs	1955–67	0.25	0.30	0.35
Brisbane	1951–70	0.10	0.15	0.25
Broome	1940–72	0.30	0.40	0.45
Canberra	1940–72	<0.10	0.10	0.20
Carnarvon	1945–72	0.15	0.20	0.30
Ceduna	1955–71	<0.10	0.10	0.25
Charleville	1942–72	0.20	0.30	0.35
Cloncurry	1940–72	0.30	0.35	0.40
Darwin	1955–69	0.25	0.35	0.40
Hobart	1944–67	<0.10	<0.10	0.10
Kalgoorlie	1939–72	0.15	0.25	0.35
Marble Bar	1957–71	0.35	0.45	0.50
Melbourne	1955–71	<0.10	0.10	0.25
Mildura	1946–72	0.10	0.20	0.30
Perth	1944–72	<0.10	0.15	0.25
Rockhampton	1940–72	0.20	0.25	0.35
Sydney	1955–72	<0.10	0.10	0.15
Townsville	1941–69	0.20	0.30	0.35
Woomera	1954–72	0.15	0.25	0.35

At inland places, relatively low night temperatures have recuperative effects after hot days. Marble Bar, Western Australia (150 km south-east of Port Hedland) for example, has median night minimum temperatures 5–10° C lower than Darwin, except in December–February. Even in this latter period although median minima at both stations are around 25° C, Marble Bar has median vapour pressures and relative humidities much lower than Darwin (by 10 millibars and 30 per cent respectively).

Acclimatised people would suffer discomfort less frequently than shown by the relative strain index figures. For example, Australians living in the north evidently experience less discomfort at high air temperatures than those in the south, if humidities are comparable.

Both direction and speed of prevailing winds are significant for the ventilation of buildings. In the tropics windward slopes allow optimal air movement, for instance, enabling more comfortable ventilation to be obtained. Regular sea breezes such as those experienced at Perth reduce discomfort and their full benefit may not be experienced until after 3 p.m. on some days.

Climatic data for capital cities

The averages and extremes for a number of elements determined from long-period observations at the Australian capitals *to 1975 inclusive*, are given in the following pages. Extremes generally cover all available data whereas averages may only refer to present sites.

CLIMATIC DATA: PERTH, WESTERN AUSTRALIA

(Lat. 31° 57′ S., Long. 115° 52′ E. Height above M.S.L. 15 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	*Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)*	*Wind (height of anemometer 22 metres)*					*Mean amt evaporation (mm)*	*No. days thunder*	*Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
		Average (km/h)	*Highest mean speed in one day (km/h)*	*Highest gust speed (km/h)*	*Prevailing direction*					
					9 a.m.	*3 p.m.*				
No. of years of record	91	30(*b*)	73	60	30(*b*)	30(*b*)	9	79	30(*b*)	30(*b*)
January	1,012.6	17.5	42.3 *27/98*	81	E	SSW	280	0.9	2.3	14
February	1,013.0	17.2	40.8 4/73	87	ENE	SSW	241	0.7	2.5	13
March	1,015.2	16.2	34.6 6/13	113	E	SSW	214	0.7	2.8	12
April	1,017.9	13.7	50.7 25/00	101	ENE	SSW	124	0.9	3.4	9
May	1,017.9	13.5	44.5 8/73	119	NE	WSW	83	1.8	4.3	6
June	1,017.5	13.5	48.6 17/27	129	N	NW	59	1.8	4.7	5
July	1,018.8	14.2	53.9 20/26	137	NNE	W	58	1.5	4.5	5
August	1,018.8	15.1	51.3 15/03	156	N	WNW	75	1.3	4.5	6
September	1,018.4	15.1	45.9 11/05	109	ENE	SSW	105	0.7	3.9	8
October	1,017.0	16.1	43.0 6/16	105	SE	SW	158	0.8	3.8	8
November	1,015.5	17.2	41.4 *18/97*	101	E	SW	205	0.8	3.1	9
December	1,013.4	17.7	41.2 6/22	103	E	SSW	241	0.9	2.6	13
Year Totals	..	..	.. ..	..	..	..	**1,843**	**12.8**	..	**108**
Year Averages	**1,016.3**	**15.6**	.. ..	..	**E**	**SSW**	..	..	**3.5**	..
Year Extremes	..	..	**53.9** **20/7/26**	**156**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Standard thirty years normal (1911–1940).

TEMPERATURE AND SUNSHINE

Month	*Air temperature daily readings (°Celsius)*			*Extreme air temperature (°Celsius)*		*Extreme temperature (°Celsius)*		*Mean daily hours sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Highest in sun*	*Lowest on grass*	
No. of years of record	79	79	79	79	77	63(*a*)	78	78
January	29.5	17.6	23.5	43.7 29/56	9.2 20/25	80.7 22/14	4.2 20/25	10.5
February	29.8	17.8	23.7	44.6 8/33	8.7 1/02	78.7 4/34	4.3 1/13	10.0
March	27.8	16.5	22.2	41.3 14/22	7.7 8/03	75.0 19/18	2.6 (*b*)	8.9
April	24.4	14.0	19.2	37.6 9/10	4.1 20/14	69.4 8/16	−0.7 26/60	7.2
May	20.6	11.5	16.1	32.4 2/07	1.3 11/14	63.3 4/25	−3.9 31/64	5.9
June	18.1	9.9	14.1	28.1 5/75	1.6 22/55	57.5 9/14	−3.4 27/46	4.8
July	17.3	9.0	13.2	24.7 21/21	1.2 7/16	56 2 13/15	−3.8 30/20	5.3
August	17.9	9.1	13.5	27.8 21/40	1.9 31/08	62.3 29/21	−3.0 18/66	6.2
September	19.4	10.1	14.8	32.7 30/18	2.6 6/56	67.5 29/16	−2.7 (*c*)	7.2
October	21.2	11.4	16.3	37.3 29/67	4.2 6/68	71.8 19/54	−1.2 16/31	8.3
November	24.5	13.8	19.2	40.3 24/13	5.6 1/04	75.0 30/25	−1.1 6/71	9.7
December	27.3	16.1	21.7	42.3 31/68	8.6 29/57	76.0 11/27	3.3 29/57	10.8
Year Averages	**23.2**	**13.1**	**18.2**	.. ..	.. ..	.. ..	.. ..	**7.9**
Year Extremes	..	..	..	**44.6** **8/2/33**	**1.2** **7/7/16**	**80.7** **22/1/14**	**−3.9** **31/5/64**	..

(*a*) Records discontinued 1963. (*b*) 8/1903 and 16/1967. (*c*) 8/1952 and 6/1956.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (mb)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (millimetres)*					*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of record	30(*a*)	30(*a*)	79	79	100	100	100	100	100	79
January	14.8	51	63	41	8	3	55 1879	Nil (*b*)	44 *27/79*	0.2
February	14.7	51	65	43	11	3	166 1955	Nil (*b*)	87 17/55	0.3
March	14.7	57	66	46	20	4	145 1934	Nil (*b*)	77 9/34	0 6
April	13.4	61	75	51	46	8	149 1926	Nil 1920	67 30/04	0.9
May	12.4	70	81	60	125	14	308 1879	14 1964	76 17/42	1.3
June	11.4	75	85	68	185	17	476 1945	55 1877	99 10/20	1.4
July	10.9	76	88	69	175	18	425 1958	61 1876	76 *4/91*	1.6
August	10.7	71	83	62	138	18	318 1945	12 1902	74 14/45	1 0
September	11.6	66	75	58	81	14	199 1923	9 1916	47 18/66	0.3
October	11.7	60	75	52	55	11	200 1890	1 1969	50 4/67	0.4
November	12.7	52	66	41	21	6	71 1916	Nil 1891	39 29/56	0.2
December	13.9	51	63	39	14	4	81 1951	Nil (*b*)	47 3/51	0.2
Year Totals	..	..	..	..	**879**	**120**	.. ..	.. ..	.. ..	**8.1**
Year Averages	**12.7**	**62**	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	**88**	**39**	..	..	**476** **6/1945**	Nil (*b*)	**99** **10/6/20**	..

(*a*) Standard thirty years normal (1911–1940). (*b*) Various years.

Figures such as *27/98*, 29/56, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: DARWIN, NORTHERN TERRITORY

(Lat. 12° 28′ S., Long. 130° 51′ E. Height above M.S.L. 30 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)	Wind (height of anemometer 36 metres)					Mean amt evaporation (mm)	No. days thunder	Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average (km/h)	Highest mean speed in one day (km/h)	Highest gust speed (km/h)	Prevailing direction 9 a.m.	Prevailing direction 3 p.m.				
No. of years of record	90	20	..	22(b)	..	..	8	35	35	35
January	1,006.2	9.3	..	106	W	NW	225	12.9	5.9	1
February	1,006.3	10.6	..	101	W	NW	187	10.2	5.8	1
March	1,007.2	7.5	..	157	W	NW	190	10.6	5.2	3
April	1,009.3	8.8	..	67	SE	NW	218	4.0	2.9	10
May	1,010.9	9.6	..	62	SE	E	223	0.5	2.0	16
June	1,012.2	10.1	..	64	SE	E	206	0.0	1.4	19
July	1,012.8	8.9	..	62	SE	E	229	0.0	1.3	20
August	1,012.6	8.6	..	72	SE	NW	238	0.0	1.1	20
September	1,011.7	8.6	..	64	ENE	NW	270	1.0	1.8	16
October	1,010.5	9.8	..	85	NE	NW	285	5.3	2.7	9
November	1,008.7	8.6	..	117	NW	NW	260	11.8	3.9	4
December	1,006.9	9.8	..	217	NW	NW	240	14.2	4.9	2
Year Totals	..	..	..	..	..	..	2,773	70.5	..	121
Year Averages	1,009.6	9.2	..	..	SE	NW	..	..	3.2	..
Year Extremes	..	..	..	157	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Several incomplete years.

TEMPERATURE AND SUNSHINE

Month	Air temperature daily readings (°Celsius)			Extreme air temperature (°Celsius)		Extreme temperature (°Celsius)		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of record	90	90	90	92(a)	92(a)	26(b)	..	21
January	32.2	25.0	28.6	37.8 *2/82*	20.0 *20/92*	75.6 26/42	..	5.9
February	31.9	24.8	28.4	38.3 *20/87*	17.2 25/49	73.2 (c)	..	5.9
March	32.4	24.8	28.6	38.9 (d)	19.2 31/45	74.3 23/38	..	6.8
April	33.1	24.2	28.7	40.0 *7/83*	16.0 11/43	72.8 1/38	..	8.6
May	32.3	22.4	27.4	39.1 *8/84*	(e)14.2 28/67	71.2 5/20	..	9.3
June	30.9	20.4	25.7	39.0 *17/37*	12.1 23/63	68.5 2/16	..	9.7
July	30.4	19.6	25.1	36.7 *17/88*	10.4 29/42	68.9 28/17	..	9.8
August	31.4	20.8	26.1	37.0 *30/71*	13.6 11/63	69.1 28/16	..	10.4
September	32.7	23.2	27.9	38.9 *20/82*	16.7 9/63	69.5 (f)	..	10.0
October	33.6	25.0	29.3	40.5 *17/92*	19.4 8/66	71.4 30/38	..	9.5
November	33.8	25.3	29.6	39.6 *9/84*	19.3 4/50	77.0 14/37	..	8.6
December	33.2	25.3	29.3	38.9 *20/82*	18.3 4/60	76.2 26/23	..	7.1
Year Averages	32.3	23.3	27.9	.. ..	.. ..	.. ..	..	8.5
Year Extremes	..	..	..	40.5 17/10/1892	10.4 29/7/1942	77.0 14/11/37	..	..

(*a*) Years 1882–1941 at Post Office, 1942–1966 at Aerodrome; 1967–1971 at Regional office; sites not strictly comparable. (*b*) Records discontinued 1942. (*c*) 5/1938 and 23/1938. (*d*) 26/1883 and 27/1883. (*e*) Recorded at Darwin Aerodrome. All other Statistics from 1967 to 1971 at Regional Office. (*f*) 28/1916 and 3/1921.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (mb)	Rel. hum. (%) at 9 a.m.			Rainfall (millimetres)					Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	
No. of years of record	85(a)	90	57(b)	57(b)	86(c)	74	107(d)	107(d)	107(d)	35
January	31.1	81	89	69	391	19	746 1974	68 1906	296 *7/97*	0.0
February	31.1	81	88	71	330	18	815 1969	13 1931	279 *18/55*	0.0
March	30.7	80	84	69	260	17	595 1965	21 1911	182 6/19	0.0
April	27.0	72	80	60	103	8	603 1891	Nil 1950	158 4/59	0.0
May	21.8	65	76	49	14	1	299 1968	Nil (e)	56 6/22	0.0
June	18.7	63	75	52	3	0	76 1973	Nil (e)	36 0/02	0.4
July	17.6	62	71	47	1	0	65 1900	Nil (e)	43 12/00	1.1
August	20.6	66	73	53	2	0	84 1947	Nil (e)	80 2/47	0.8
September	24.7	68	73	54	13	2	108 1942	Nil (e)	71 21/42	0.2
October	27.7	68	72	60	50	5	339 1954	Nil (e)	95 28/56	0.0
November	29.3	70	75	62	126	11	399 1938	10 1870	120 19/51	0.0
December	30.5	75	83	65	243	16	616 1974	25 1934	200 28/10	0.0
Year Totals	..	..	..	..	1,536	97	.. ..	.. ..	.. ..	2.5
Year Averages	25.9	71	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	89	47	..	..	815 2/69	Nil (f)	296 7/1/1897	..

(*a*) Records to 1966 at Aerodrome. (*b*) 1882 to 1938 at Post Office. (*c*) 1869 to 1962 at Post Office; 8 years missing. (*d*) Highest or lowest at either Post Office, Aerodrome or Regional Office Sites. (*e*) Various years. (*f*) April to October. Various years. Figures such as 2/82, 26/42, etc., indicate in respect of the month of reference, the day and year of occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: ADELAIDE, SOUTH AUSTRALIA

(Lat. 34° 46′ S., Long. 138° 35′ E. Height above M.S.L. 43 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)	Wind (height of anemometer 22 metres)					Mean amt evaporation (mm)	No. days thunder	Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average (km/h)	Highest mean speed in one day (km/h)	Highest gust speed (km/h)	Prevailing direction					
					9 a.m.	3 p.m.				
No. of years of record	119	20(*b*)	20(*b*)	59	30(*c*)	30(*c*)	9	104	108	61
January	1,013.2	12.8	32.2 12/70	116	SW	SW	261	1.5	3.0	12.0
February	1,014.3	12.1	28.8 25/67	106	NE	SW	224	1.1	3.0	10.7
March	1,017.2	11.4	30.7 24/64	126	S	SW	180	0.8	3.3	10.7
April	1,019.8	11.4	37.4 10/56	130	NE	SW	126	1.0	4.2	6.8
May	1,020.1	11.3	37.8 19/53	113	NE	NW	80	1.0	4.7	4.5
June	1,019.8	11.6	29.7 16/70	108	NE	N	57	0.9	5.0	3.8
July	1,019.9	11.8	32.9 13/64	148	NE	NW	61	0.8	4.9	3.5
August	1,019.0	12.8	38.2 8/55	121	NE	SW	76	1.1	4.2	4.7
September	1,017.6	13.2	34.9 16/65	111	NNE	SW	113	1.3	4.3	5.5
October	1,016.0	13.6	35.4 1/68	121	NNE	SW	169	1.9	4.2	5.6
November	1,015.1	13.9	36.3 14/68	130	SW	SW	202	2.0	3.9	6.5
December	1,013.3	13.5	31.1 18/69	121	SW	SW	247	1.5	3.4	8.8
Year Totals	..	..	.. ..	..	..	..	**1,795**	**14.9**	..	**83.1**
Year Averages	**1,017.1**	..	.. ..	..	**NE**	**SW**	..	..	**4.0**	..
Year Extremes	..	..	**38.2 8/8/65**	**148**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Records of cup anemometer. (*c*) Standard 30 years normal (1931–1960).

TEMPERATURE AND SUNSHINE

Month	Air temperature daily readings (°Celsius)			Extreme air temperature (°Celsius)		Extreme temperature (°Celsius)		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of record	119	119	119	119	119	54(*a*)	115	94
January	29.6	16.4	23.0	47.6 12/39	7.3 *21/84*	82.3 *18/82*	2.5 *14/79*	9.9
February	29.4	16.6	23.0	45.3 *12/99*	7.5 23/18	76.9 10/00	2.1 23/26	9.3
March	26.9	15.1	21.0	43.6 9/34	6.6 21/33	78.9 *17/83*	0.1 21/33	7.9
April	22.7	12.7	17.7	37.0 5/38	4.2 *15/59*	68.3 *1/83*	−2.2 14/63	6.0
May	18.7	10.3	14.5	31.9 4/21	2.7 (*b*)	64.6 *12/79*	−3.6 19/28	4.8
June	15.8	8.3	12.1	25.6 4/57	0.3 (*c*)	59.3 *18/79*	−6.1 24/44	4.2
July	15.0	7.3	11.1	26.6 29/75	0.0 24/08	56.9 *26/90*	−5.5 30/29	4.3
August	16.4	7.8	12.1	29.4 31/11	0.2 *17/59*	60.0 *31/92*	−5.1 11/29	5.3
September	18.9	9.0	14.0	35.1 30/61	0.4 *4/58*	71.4 *23/82*	−3.9 25/27	6.2
October	22.0	10.9	16.5	39.4 21/22	2.3 *20/58*	72.2 30/21	−3.0 22/66	7.2
November	25.2	12.9	19.1	45.3 *21/65*	4.9 2/09	74.9 *20/78*	−0.3 2/09	8.6
December	27.8	14.9	21.4	45.9 29/31	6.1 (*d*)	79.8 *7/99*	0.3 *4/84*	9.4
Year Averages	**22.4**	**11.8**	**17.1**	..	..	..	..	**6.9**
Year Extremes	..	..	..	**47.6** 12/1/39	**0.0** 24/7/08	**82.3** 18/1/62	**−6.1** 24/6/44	..

(*a*) Discontinued 1934 incomplete 1931–1934. (*b*) *26/1895* and 24/04. (*c*) *27/1876* and 24/44. (*d*) *16/1861* and 4/06.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (mb)	Rel. hum. (%) at 9 a.m.			Rainfall (millimetres)					Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	
No. of years of record	108	108	108	108	137	137	137	137	137	76
January	11.9	41	59	29	20	4	84 1941	Nil (*a*)	58 *2/89*	0.0
February	12.5	44	61	30	21	4	155 1925	Nil (*a*)	141 7/25	0.0
March	12.0	47	62	29	24	5	117 1878	Nil (*a*)	89 *5/78*	0.0
April	11.5	57	72	37	44	9	154 1971	Nil 1945	80 *5/60*	0.0
May	10.8	67	77	49	69	13	197 1875	3 1934	70 *1/53*	0.4
June	10.0	75	84	63	72	15	218 1916	6 1958	54 1/20	1.1
July	9.5	76	87	66	67	16	138 1890	10 1899	44 *10/65*	1.3
August	9.7	70	80	54	62	16	157 1852	8 1944	57 *19/51*	0.6
September	10.0	61	72	44	51	13	148 1923	7 1951	40 20/23	0.2
October	10.2	52	67	29	44	11	133 1949	1 1969	57 16/08	0 0
November	10.5	45	64	31	31	8	113 1839	1 1963	75 12/60	0.0
December	11.3	42	56	31	26	6	101 1861	Nil 1904	61 23/13	0.0
Year Totals	..	..	..	..	**531**	**120**	.. ..	.. ..	.. ..	**3.6**
Year Averages	**10.5**	**56**	..	..	..	..	.. ..	.. ..	.. ..	..
Year Extremes	..	..	**87**	**29**	..	..	**218** 6/1916	Nil (*b*)	**141** 7/2/25	..

(*a*) Various years. (*b*) December to April, various years.

Figures such as 3/55, *21/84*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: BRISBANE, QUEENSLAND

(Lat. 27° 28′ S., Long. 153° 2′ E. Height above M.S.L. 41 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	*Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)*	*Wind (height of anemometer 32 metres)* *Average (km/h)*	*Highest mean speed in one day (km/h)*	*Highest gust speed (km/h)*	*Prevailing direction* *9 a.m.*	*3 p.m.*	*Mean amt evaporation (mm)*	*No. days thunder*	*Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
No. of years of record .	89	60	60	60	25(*b*)	25(*b*)	9	89	84	68
January . . .	1,011.7	12.1	31.8 23/47	109	SE	ENE	189	4.6	4.6	3.3
February . . .	1,012.5	11.9	37.3 21/54	108	SSW	ENE	150	3.7	4.8	2.4
March . . .	1,014.6	11.4	32.7 1/29	106	SSW	ESE	149	2.3	4.3	5.6
April . . .	1,017.3	10.5	26.8 3/25	104	SW	ESE	127	1.4	3.6	7.8
May	1,018.3	9.8	28.8 17/26	87	SW	WSW	89	0.6	3.3	10.0
June	1,018.5	10.0	30.5 14/28	95	SW	WSW	70	0.5	3.3	10.5
July	1,018.8	9.7	35.4 13/54	111	SW	WSW	77	0.4	2.9	13.3
August . . .	1,018.8	10.0	23.8 4/35	100	SW	NE	105	1.4	2.6	13.5
September . . .	1,017.6	10.5	25.9 1/48	102	SW	NE	133	2.8	2.8	12.4
October . . .	1,015.9	11.1	25.3 1/41	100	SSW	NE	168	4.4	3.5	8.5
November . . .	1,014.1	11.4	24.9 10/28	111	SE	NE	191	5.7	3.9	6.1
December . . .	1,012.1	11.9	31.3 15/26	128	SSE	NE	209	6.6	4.3	4.5
Year **Totals** . .	..	..	.. ..	..	..	..	**1,656**	**34.2**	..	**97.7**
Year **Averages** . .	**1,015.9**	**10.8**	.. ..	..	**SW**	**ENE**	..	..	**3.6**	..
Year **Extremes** . .	..	..	**35.7** **21/2/54**	**128**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) 1950–1974.

TEMPERATURE AND SUNSHINE

Month	*Air temperature daily readings (°Celsius)* *Mean max.*	*Mean min.*	*Mean*	*Extreme air temperature (°Celsius)* *Highest*	*Lowest*	*Extreme temperature (°Celsius)* *Highest in sun*	*Lowest on grass*	*Mean daily hours sunshine*
No. of years of record .	89	89	89	89	89	50(*a*)	89	67
January . . .	29.4	20.6	25.0	43.2 26/40	14.9 *4/93*	76.2 2/37	9.9 *4/93*	7.5
February . . .	28.9	20.4	24.7	40.9 21/25	14.7 21/31	74.0 6/10	9.5 22/31	7.0
March . . .	27.8	19.2	23.5	38.8 13/65	11.3 29/13	72.5 6/39	7.4 29/13	6.8
April . . .	26.0	16.4	21.2	36.1 19/73	6.9 25/25	67.7 11/16	2.6 24/25	7.1
May	23.1	13.1	18.0	32.4 21/23	4.8 30/51	63.9 1/10	−1.2 *8/97*	6.8
June	20.8	10.7	15.7	31.6 19/18	2.4 29/08	57.8 3/18	−3.7 *23/88*	6.6
July	20.3	9.4	14.9	29.1 23/46	2.3 (*b*)	63.4 20/15	−4.5 11/90	7.0
August . . .	21.8	10.0	15.9	32.8 14/46	2.7 13/64	61.1 20/17	−2.7 *9/99*	7.8
September . . .	24.0	12.7	18.3	38.3 22/43	4.8 1/96	68.6 26/03	−0.9 *1/89*	8.3
October . . .	26.1	15.8	20.9	40.7 30/58	6.3 *3/99*	69.7 31/18	1.6 *8/89*	8.2
November . . .	27.8	17.9	22.9	41.2 18/13	9.2 2/05	72.4 *7/89*	3.8 1/05	8.2
December . . .	29.1	19.6	24.5	41.1 *26/93*	13.5 5/55	74.4 28/42	9.5 *3/94*	8.1
Year **Averages** . .	**25.4**	**15.5**	**20.5**	..	..	..	..	**7.5**
Year **Extremes** . .	..	..	..	**43.2** **26/1/1940**	**2.3**	**76.2** **2/1/1937**	**−4.5** **11/7/1890**	..

(*a*) 1887–1926, 1936–March 1947. (*b*) *12/1894* and *2/1896*.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (mb)*	*Rel. hum. (%) at 9 a.m.* *Mean*	*Highest mean*	*Lowest mean*	*Rainfall (millimetres)* *Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	*Fog Mean No. days*
No. of years of record .	64	89	89	89	124	116	123	123	123	89
January . . .	21.7	65	79	53	167	13	872 1974	8 1919	465 *21/87*	0.5
February . . .	22.0	69	82	55	161	14	1,026 1893	15 1849	270 6/31	0.6
March . . .	20.9	71	85	56	144	15	865 1870	Nil 1849	284 14/08	1.1
April . . .	17.5	70	80	56	88	11	388 1867	1 1944	178 3/72	2.1
May	14.3	71	85	59	69	9	352 1876	Nil 1846	143 *9/79*	3.0
June	12.1	72	84	54	69	8	647 1967	Nil 1847	283 12/67	2.9
July	11.1	70	88	53	54	7	330 1973	Nil (*a*)	193 20/65	3.0
August . . .	11.7	66	80	53	48	7	373 1879	Nil (*b*)	124 *12/87*	3.6
September . . .	13.8	63	76	47	48	8	138 1886	3 1907	79 12/65	2.5
October . . .	16.0	60	72	48	74	9	456 1972	(*c*) 1948	136 25/49	1.2
November . . .	18.1	59	72	45	95	10	315 1917	Nil 1842	143 *8/66*	0.5
December . . .	20.1	61	70	51	129	12	441 1942	9 1865	168 *28/71*	0.3
Year **Totals** . .	..	..	..	..	**1,157**	**123**	.. ..	.. ...	.. ..	**21.3**
Year **Averages** . .	**16.6**	**66**	..	..	..	..	.. ..	.. ..	.. ..	..
Year **Extremes** . .	..	..	**88**	**45**	..	..	**1,026** **2/1893**	**Nil** **Various**	**465** **21/1/1887**	..

(*a*) 1841 and 1951. (*b*) 1862, 1869 and 1880. (*c*) Less than 1 mm.

Figures such as 23/47, *4/93*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: SYDNEY, NEW SOUTH WALES

(Lat. 33° 52′ S., Long., 151° 12′ E. Height above M.S.L. 42 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)	*Wind (height of anemometer 22 metres)*					Mean amt evaporation (mm)	No. days thunder	Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)	No. clear days
		Average (km/h)	Highest mean speed in one day (km/h)	Highest gust speed (km/h)	Prevailing direction					
					9 a.m.	3 p.m.				
No. of years of record	66	25(*b*)	25(*b*)	25(*b*)	25(*b*)	25(*b*)	84(*c*)	56	114	65
January	1,012.7	12.3	30.3 10/49	150	NE	NE	189	3.3	4.7	4.9
February	1,014.2	11.6	30.3 18/57	101	NE	ENE	142	2.5	4.8	4.5
March	1,016.4	10.5	33.3 10/44	93	WNW	ENE	142	1.7	4.4	5.7
April	1,018.3	10.2	36.2 24/44	116	W	ENE	108	1.3	4.1	7.3
May	1,018.7	10.5	33.8 18/55	101	W	ENE	85	0.9	3.9	7.7
June	1,018.9	11.6	36.0 10/47	135	W	WSW	58	0.8	4.0	8.0
July	1 018.5	11.5	34.3 20/51	106	W	WSW	73	0.8	3.5	10.5
August	1,017.9	12.1	39.6 9/51	109	WNW	WNW	112	1.4	3.3	10.4
September	1,017.0	11.6	35.1 23/42	113	WNW	NE	150	1.8	3.5	9.1
October	1,015.1	12.3	39.4 1/57	153	WNW	ENE	203	2.7	4 1	6.5
November	1,013.4	12.4	31.9 21/54	114	WNW	ENE	190	3.6	4.5	5.2
December	1,012.1	12.3	36.2 11/52	121	NE	ENE	225	3.8	4.6	4.8
Year **Totals**	..	..	.. ..	..	..	..	**1,677**	**24.7**	..	**84.7**
Averages	**1,016.1**	**11.6**	.. ..	..	WNW	ENE	..	..	**4.2**	..
Extremes	..	..	**39.6 9/8/51**	**153**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Years 1938–1962 inclusive. (*c*) Richmond records.

TEMPERATURE AND SUNSHINE

Month	*Air temperature daily readings (°Celsius)*			*Extreme air temperature (°Celsius)*		*Extreme temperature (°Celsius)*		Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest	Lowest	Highest in sun	Lowest on grass	
No. of years of record	117	117	117	117	117	84(*a*)	117	55
January	25.7	18.3	22.0	45.3 14/39	10.6 18/49	73.5 26/15	6.5 6/25	7.2
February	25.4	18.4	21.9	42.1 8/26	9.6 *28/63*	76.3 14/39	6.0 22/33	6.8
March	24.5	17.3	20.9	39.2 *3/69*	9.3 *14/86*	70.2 10/26	4.4 17/13	6.3
April	22.1	14.5	18.3	33.0 (*b*)	7.0 *27/64*	62.3 *10/77*	0.7 24/09	6.2
May	19.2	11.2	15.2	30.0 1/19	4.4 *30/62*	54.3 *1/96*	−1.5 25/17	5.8
June	16.6	9.1	12.8	26.9 11/31	2.1 22/32	52.1 2/23	−2.2 22/32	5.2
July	15.8	7.8	11.8	25.7 22/26	2.2 *12/90*	51.9 *19/77*	−4.4 *4/93*	6.2
August	17.4	8.7	13.1	30.4 24/54	2.7 *3/72*	65.0 *30/78*	−3.3 4/09	6.8
September	19.6	10.8	15.2	34.6 26/65	4.9 2/45	61.2 *12/78*	−1.1 17/05	7.1
October	21.9	13.3	17.6	37.4 4/42	5.7 6/27	66.8 20/33	0.4 9/05	7.3
November	23.5	16.3	19.4	40.3 6/46	7.7 1/05	70.3 *28/99*	1.9 21/67	7.6
December	24.9	17.2	21.1	42.2 20/57	9.1 3/24	73.5 *27/89*	5.2 3/24	7.4
Year **Averages**	**21.4**	**13.6**	**17.4**	..	..	..	..	6.7
Extremes	..	..	..	**45.3 14/1/39**	**2.1 22/6/32**	**76.3 14/2/39**	**−4.4 4/7/1893**	..

(*a*) Records discontinued 1946. (*b*) 1/36 and 10/69.

HUMIDITY, RAINFALL, AND FOG

Month	Vapour pressure mean 9 a.m. (mb)	*Rel. hum. (%) at 9 a.m.*			*Rainfall (millimetres)*					Fog Mean No. days
		Mean	Highest mean	Lowest mean	Mean mthly	Mean No. of days of rain	Greatest monthly	Least monthly	Greatest in one day	
No. of years of record	100	100	100	100	117	117	117	117	117	55
January	18.8	68	78	58	100	13	388 1911	6 1932	180 13/11	0.3
February	19.2	70	81	60	115	13	564 1950	3 1939	226 *25/73*	0.6
March	18.3	74	85	62	131	14	521 1942	8 1965	281 28/42	1.5
April	15.0	74	87	63	126	13	622 1861	2 1868	191 *29/60*	2.1
May	11.9	75	90	63	123	13	585 1919	4 1957	212 *28/89*	3.1
June	10.2	76	89	63	133	12	643 1950	4 1962	131 *16/84*	2.7
July	9.6	74	88	59	104	11	336 1950	2 1970	198 7/31	2.1
August	9.5	68	84	54	81	11	378 1899	1 1885	140 22/71	1.7
September	11.3	66	79	49	69	11	357 1879	2 1882	145 *10/79*	0.9
October	13.0	62	77	46	76	12	283 (*a*)	2 1971	162 13/02	0.6
November	15.0	62	79	42	78	12	577 1961	2 1915	133 27/55	0.5
December	17.6	64	77	51	79	13	402 1920	6 1913	121 13/10	0.4
Year **Totals**	..	..	..	..	**1,215**	**148**	.. ..	.. ..	.. ..	**16.3**
Averages	**14.1**	**69**	..	..	..	..	.. ..	.. ..	.. ..	..
Extremes	..	..	**90**	**42**	..	..	**643 6/1950**	**1 8/1885**	**281 28/3/1942**	..

(*a*) 1916 and 1959.

Figures such as 10/49, *28/63*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: CANBERRA, AUSTRALIAN CAPITAL TERRITORY

(Lat. 35° 19′ S., Long. 149° 11′ E. Height above M.S.L. 571 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

Month	*Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)*	*Wind (height of anemometer 10 metres)*					*Mean amt evaporation (mm)*	*No. days thunder*	*Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
		Average (km/h)	*Highest mean speed in one day (km/h)*	*Highest gust speed (km/h)*	*Prevailing direction 9 a.m.*	*Prevailing direction 3 p.m.*				
No. of years of record	36	44(*b*)	44(*b*)	36(*c*)	36(*c*)	36(*c*)	8	36	36	36(*d*)
January	1,012.1	6.6	24 24/33	121	NW	NW	242	3.3	4.1	7.7
February	1,013.1	6.1	25 24/33	104	NW	NW	194	3.0	4.4	6.5
March	1,016.0	5.3	29 28/42	111	SE	NW	165	1.7	4.2	7.6
April	1,018.8	5.0	30 8/45	106	NW	NW	109	0.8	4.2	6.9
May	1,019.0	4.4	21 27/58	104	NW	NW	71	0.4	4.5	6.7
June	1,021.0	4.8	26 2/30	96	NW	NW	46	0.2	4.6	6.5
July	1,020.2	5.0	38 7/31	102	NW	NW	54	0.1	4.4	7.0
August	1,018.5	5.9	25 25/36	113	NW	NW	77	0.8	4.4	6.7
September	1,017.4	6.0	28 28/34	107	NW	NW	115	1.1	4.1	7.9
October	1,014.8	6.5	23 12/57	119	NW	NW	165	2.2	4.4	6.1
November	1,011.9	6.9	28 28/42	128	NW	NW	200	3.3	4.4	5.7
December	1,010.7	6.9	26 11/38	106	NW	NW	259	3.4	4.1	7.5
Year Totals	..	..	..	..	..	..	**1,697**	**20.3**	..	**82.8**
Year Averages	**1,016.1**	**5.8**	..	..	**NW**	**NW**	..	..	**4.3**	**6.9**
Year Extremes	..	..	**38 7/7/31**	**128**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Recorded at Forestry and Timber Bureau, Yarralumla, where a cup anemometer is installed. (*c*) Recorded at Meteorological office, R.A.A.F. Fairbairn, where a Dines Pressure Tube anemometer is installed. (*d*) 1940–75. Formerly assessed over 37-year period at Yarralumla.

TEMPERATURE AND SUNSHINE

Month	*Air temperature daily readings (°Celsius)*			*Extreme air temperature (°Celsius)*		*Extreme temperature (°Celsius)*		*Mean daily hours sunshine*
	Mean max.	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Highest in sun*	*Lowest on grass*	
No. of years of record	36	36	36	36	36	..	22	37
January	27.5	12.9	20.2	41.4 31/68	1.8 1/56	..	−0.4 1/56	8.9
February	26.6	12.6	19.6	42.2 1/68	3.0 16/62	..	0.2 17/70	8.2
March	24.3	10.4	17.3	36.4 9/40	−1.1 24/67	..	−4.0 (*a*)	7.5
April	19.6	6.5	13.1	32.6 12/68	−3.3 26/72	..	−8.3 24/69	6.9
May	14.9	2.8	8.9	24.5 10/67	−7.3 16/57	..	−10.4 26/69	5.6
June	12.0	0.8	6.4	20.1 3/57	−8.5 8/57	..	−13.4 25/71	4.8
July	11.1	−0.3	5.4	19.7 29/75	−10.0 11/71	..	−15.1 11/71	5.1
August	12.6	0.8	6.7	21.7 24/54	−7.8 6/74	..	−12.8 11/69	6.1
September	15.8	2.7	9.3	28.6 26/65	−5.6 5/40	..	−10.6 12/71	7.4
October	19.0	5.8	12.4	32.7 13/46	−3.3 4/57	..	−6.2 4/57	7.9
November	22.2	8.2	15.1	38.8 19/44	−1.8 28/67	..	−6.3 28/67	8.7
December	26.0	11.1	18.6	38.8 21/53	1.1 18/64	..	−3.9 18/64	9.1
Year Averages	**19.3**	**6.2**	**12.7**	..	..	..	..	**7.2**
Year Extremes	..	..	..	**42.2 1/2/68**	**−10.0 11/7/71**	..	**−15.1 11/7/71**	..

(*a*) 30/58 and 24/67.

HUMIDITY, RAINFALL, AND FOG

Month	*Vapour pressure mean 9 a.m. (mb)*	*Rel. hum. (%) at 9 a.m.*			*Rainfall (millimetres)*					*Fog Mean No. days*
		Mean	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	
No. of years of record	36(*a*)	36	36	36	36	36	36	36	36	36
January	13.1	60	75	42	61	8	164 1941	1 1947	95 12/45	1.1
February	14.0	65	81	53	59	7	145 1948	Nil 1968	69 20/74	1.2
March	13.1	69	81	53	51	7	312 1950	1 1954	66 5/59	2.8
April	10.7	75	84	38	50	8	164 1974	2 1942	75 2/59	4.1
May	8.7	84	96	73	51	9	150 1953	2 1961	96 3/48	7.5
June	7.1	85	97	73	39	9	126 1956	5 1971	45 25/56	7.6
July	6.6	84	93	68	38	10	103 1960	4 1970	35 10/57	7.7
August	7.1	80	92	58	47	12	156 1974	7 1944	48 29/74	5.0
September	8.1	74	82	55	50	10	116 1970	6 1946	41 16/62	4.1
October	10.0	67	82	50	73	12	148 1959	6 1940	105 21/59	3.1
November	10.7	59	76	38	64	10	135 1961	13 1940	64 9/50	1.4
December	12.3	59	74	43	56	8	215 1947	Nil 1967	87 30/48	0.6
Year Totals	..	..	..	..	**639**	**110**	..	..	..	**46.2**
Year Averages	**9.3**	**72**	..	..	..	..	..	..	..	..
Year Extremes	..	..	**97**	**38**	..	..	**312 3/50**	**Nil (*b*)**	**105 21/10/59**	..

(*a*) Formerly assessed over 38-year period at Forestry and Timber Bureau, Yarralumla. (*b*) 12/67 and 2/68.

Data shown in the above tables relate to the Meteorological Office, R.A.A.F., Fairbairn, except where otherwise indicated, and generally cover years up to 1975. Figures such as 23/33, 31/68, etc., indicate, in respect of the month of reference, the day and year of the occurrence

CLIMATIC DATA: MELBOURNE, VICTORIA

(Lat. 37° 49′ S., Long. 144° 58′ E. Height above M.S.L. 35 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

		Wind (height of anemometer 28 metres)									
Month	*Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)*	*Average (km/h)*	*Highest mean speed in one day (km/h)*		*Highest gust speed (km/h)*	*Prevailing direction 9 a.m.*	*Prevailing direction 3 p.m.*	*Mean amt evaporation (mm)*	*No. days thunder*	*Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
No. of years of record	119	36(*b*)		63	66	57	57	9	68	119	68
January	1,012.8	12.8	34.0	27/41	106	S	S	228	1.7	4.1	6.7
February	1,014.3	12.4	30.6	13/47	119	S	S	198	1.9	4.0	6.1
March	1,016.8	11.3	29.0	3/61	106	N	S	155	1.3	4.3	5.5
April	1,018.9	10.9	33.7	27/71	108	N	S	97	0.7	4.7	4.2
May	1,019.1	11.4	33.0	4/61	116	N	N	59	0.4	5.2	2.9
June	1,019.0	11.4	36.7	16/47	103	N	N	38	0.2	5.3	2.8
July	1,018.6	12.8	36.9	24/70	109	N	N	47	0.2	5.2	2.5
August	1,017.5	12.5	34.3	20/42	108	N	N	60	0.6	5.0	2.7
September	1,016.0	12.7	34.0	15/64	111	N	S	91	0.8	4.8	3.6
October	1,014.7	12.8	30.4	6/68	111	N	S	130	1.6	4.8	3.4
November	1,013.9	13.3	35.8	8/71	114	SW	S	161	1.9	4.9	3.2
December	1,012.4	13.1	33.8	12/52	100	S	S	209	2.2	4.5	4.4
Year Totals	..	..	..	..	..	..	..	**1,468**	**13.4**	..	**48.0**
Year Averages	**1,016.2**	**12.3**	..	..	..	**N**	**S**	..	..	**4.7**	..
Year Extremes	..	..	**36.9**	**24/7/70**	**119**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Early records not comparable. (*c*) Records to 1966.

TEMPERATURE AND SUNSHINE

	Air temperature daily readings (°Celsius)			*Extreme air temperature (°Celsius)*				*Extreme temperature (°Celsius)*				
Month	*Mean max.*	*Mean min.*	*Mean*	*Highest*		*Lowest*		*Highest in sun*		*Lowest on grass*		*Mean daily hours sunshine*
No. of years of record	120	120	120		120		120		86(*a*)		116	52(*b*)
January	25.8	13.9	19.9	45.6	13/39	5.6	*28/85*	81.4	*14/62*	−1.0	*28/85*	8.1
February	25.7	14.2	19.9	43.1	7/01	4.6	24/24	75.3	*15/70*	−0.6	*6/91*	7.5
March	23.7	12.8	18.3	41.7	11/40	2.8	*17/84*	73.6	*1/68*	−1.7	(*c*)	6.6
April	20.1	10.5	15.3	34.9	5/38	1.6	*24/88*	66.7	*8/61*	−3.9	*23/97*	5.1
May	16.5	8.3	12.4	28.7	7/05	−1.2	29/16	61.4	*2/59*	−6.1	26/16	3.9
June	13.9	6.6	10.3	22.4	2/57	−2.2	11/66	53.9	*11/61*	−6.7	30/29	3.4
July	13.3	5.7	9.5	23.1	30/75	−2.8	*21/69*	52.1	*27/80*	−6.4	12/03	3.7
August	14.8	6.4	10.6	25.0	*20/85*	−2.1	*11/63*	58.6	*29/69*	−5.9	14/02	4.6
September	17.1	7.6	12.4	31.4	28/28	−0.6	3/40	61.2	*20/67*	−5.1	8/18	5.5
October	19.5	9.2	14.4	36.9	24/14	0.1	*3/71*	67.9	*28/68*	−4.0	22/18	5.9
November	21.8	10.8	16.3	40.9	*27/94*	2.4	*2/96*	70.9	*29/65*	−4.1	*2/96*	6.5
December	24.1	12.6	18.4	43.7	*15/76*	4.4	*4/70*	76.8	*20/69*	0.7	1/04	7.3
Year Averages	**19.9**	**9.9**	**14.8**	..	..	..	..	..	..	..	..	**5.7**
Year Extremes	..	..	..	**45.6**	**13/1/39**	**−2.8**	**21/7/69**	**81.4**	**14/1/62**	**−6.7**	**30/6/29**	..

(*a*) Discontinued 1946. (*b*) Discontinued 1967. (*c*) 17/1884 and 20/1897.

HUMIDITY, RAINFALL, AND FOG

					Rainfall (millimetres)								
		Rel. hum. (%) at 9 a.m.											
Month	*Vapour pressure mean 9 a.m. (mb)*	*Mean*	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*		*Least monthly*		*Greatest in one day*		*Fog Mean No. days*
No. of years of record	68	68	68	68	120	120		120		120		120	118
January	13.1	61	68	50	48	8	176	1963	(*a*)	1932	108	29/63	0.1
February	14.1	63	77	48	50	7	238	1972	(*a*)	1965	87	26/46	0.3
March	13.3	66	79	50	54	9	191	1911	4	1934	90	5/19	0.7
April	11.7	72	82	66	59	11	195	1960	Nil	1923	80	23/60	1.8
May	10.3	79	88	70	57	14	142	1942	4	1934	51	15/74	3.6
June	9.3	83	92	73	50	14	114	1859	8	1858	44	22/04	4.6
July	8.9	81	87	73	49	15	178	1891	15	1902	74	*12/91*	4.3
August	9.1	75	82	65	50	15	111	1939	12	1903	54	*17/81*	2.3
September	9.5	68	76	60	59	14	201	1916	13	1907	59	23/16	0.8
October	10.5	63	72	52	68	14	193	1869	7	1914	61	21/53	0.4
November	11.3	61	70	52	59	12	206	1954	6	1895	73	21/54	0.2
December	12.5	60	69	48	58	10	182	1863	1	1972	100	4/54	0.2
Year Totals	..	..	..	..	**661**	**143**	..	..	..	..	..	..	**19.3**
Year Averages	**11.1**	**69**	..	..	..	..	..	..	..	..	..	..	..
Year Extremes	..	..	**92**	**43**	..	..	**238**	**2/72**	**Nil**	**4/23**	**108**	**29/1/63**	..

(*a*) Less than 1 mm.

Figures such as 27/41, *28/85*, etc., indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

CLIMATIC DATA: HOBART, TASMANIA

(Lat. 42° 53′ S., Long. 147° 20′ E. Height above M.S.L. 54 metres)

BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDS, AND CLEAR DAYS

		Wind (height of anemometer 12 metres)							
Month	*Mean of 9 a.m. and 3 p.m. atmospheric pressure reduced to mean sea level (mb)*	*Average (km/h)*	*Highest mean speed in one day (km/h)*	*Highest gust speed (km/h)*	*Prevailing direction 9 a.m.*	*Prevailing direction 3 p.m.*	*Mean amt evaporation (mm)*	*No. days thunder*	*Mean daily amt clouds 9 a.m., 3 p.m., 9 p.m. (a)*	*No. clear days*
No. of years of record	90	63	64	84	30(*b*)	30(*b*)	10(*c*)	64	90	30(*b*)
January	1,010.6	12.6	33.5 30/16	130	NNW	SSE	167	1.0	5.0	1.9
February	1,012.9	11.5	40.6 4/27	121	NNW	SSE	135	1.0	4.9	2.3
March	1,014.3	11.0	34.4 13/38	127	NW	SSE	109	0.7	4.8	2.4
April	1,015.5	10.9	38.8 9/52	121	NW	W	70	0.3	5.0	1.7
May	1,015.4	10.4	35.4 21/65	135	NNW	NW	38	0.0	5.0	2.4
June	1,015.2	10.2	38.2 27/20	132	NW	NW	22	0.0	5.0	2.4
July	1,014.0	10.7	36.9 22/53	129	NNW	NNW	26	0.0	4.8	2.0
August	1,012.8	10.9	41.0 19/26	140	NNW	NW	44	0.1	4.8	2.1
September	1,011.4	12.5	43.1 28/65	150	NNW	NW	73	0.1	4.9	1.5
October	1,010.3	12.6	32.4 3/65	140	NNW	SW	107	0.4	5.2	1.0
November	1,009.8	12.8	34.1 18/15	135	NNW	S	123	0.6	5.3	1.3
December	1,009.4	12.4	37.7 1/34	122	NNW	SSE	150	0.8	5.3	1.1
Year Totals	..	..	.. ..	..	..	..	**1,064**	**5.1**	..	**22.1**
Averages	**1,012.6**	**11.5**	.. ..	..	NNW	W	..	..	**5.0**	..
Extremes	..	..	**43.1 28/9/65**	**150**	..	..	..	..	..	..

(*a*) Scale 0–8. (*b*) Standard thirty years normal (1911–1940). (*c*) Class "A" American pan.

TEMPERATURE AND SUNSHINE

	Air temperature daily readings (°Celsius)			*Extreme air temperature (°Celsius)*		*Extreme temperature (°Celsius)*		
Month	*Mean max.*	*Mean min.*	*Mean*	*Highest*	*Lowest*	*Highest in sun*	*Lowest on grass*	*Mean daily hours sunshine*
No. of years of record	92	92	92	92	92	57(*a*)	87	79
January	21.4	11.5	16.5	40.8 4/76	4.5 (*b*)	71.1 (*c*)	−0.8 *19/97*	7.9
February	21.5	11.8	16.7	40.2 *12/99*	3.9 *20/87*	73.9 *24/98*	−2.0 *—/87*	7.0
March	20.0	10.6	15.3	37.3 13/40	1.8 31/26	66.1 26/44	−2.5 30/02	6.4
April	17.1	8.7	12 9	30.6 1/41	0.6 14/63	61.1 *18/93*	−3.9 *—/86*	5.0
May	14.2	6.7	10.5	25.5 5/21	−1.6 30/02	53.3 (*d*)	−6.7 19/02	4.3
June	11.8	5.1	8.5	20.6 1/07	−2.8 25/72	50.0 *12/94*	−7.7 24/63	3.9
July	11.4	4.4	7.9	21.0 30/75	−2.4 (*f*)	49.4 *12/93*	−7.4 *16/86*	4.3
August	12.8	5.0	8.9	22.0 28/14	−1.8 5/62	54.4 —/87	−6.6 7/09	5.0
September	14.9	6.2	10.6	28.2 29/73	−0.6 *16/97*	58.9 *23/93*	−7.6 16/26	5.9
October	16.7	7.5	12.1	33.4 24/14	0.0 *12/89*	68.9 *9/93*	−4.6 (*e*)	6.3
November	18.5	9.0	13.8	36.8 26/37	1.6 16/41	55.6 *19/92*	−3.4 1/08	7.0
December	20.2	10.5	15.4	40.7 *30/97*	3.3 3/06	71.9 10/39	−2.6 *—/86*	7.2
Year Averages	**16.7**	**8.1**	**12.4**	.. ..	.. ..	.. ..	.. ..	**5.9**
Extremes	..	..	..	**40.8 4/1/1976**	**−2.8 25/6/72**	**73.9 24/2/1968**	**−7.7 24/6/1963**	..

(*a*) Period 1934–1938 not comparable; records discontinued 1946. (*b*) 09/1937 and 11/1937. (*c*) 05/1886 and 13/1905. (*d*)—/1899 and —/1893. (*e*) 1/1886 and 1/1899. (*f*) 11/1895 and 7/1973.

HUMIDITY, RAINFALL, AND FOG

		Rel. hum. (%) at 9 a.m.			*Rainfall (millimetres)*					
Month	*Vapour pressure mean 9 a.m. (mb)*	*Mean*	*Highest mean*	*Lowest mean*	*Mean mthly*	*Mean No. of days of rain*	*Greatest monthly*	*Least monthly*	*Greatest in one day*	*Fog Mean No. days*
No. of years of record	77(*a*)	81	81	81	93	93	92	92	131	64
January	11.0	58	81	45	49	11	150 1893	4 1958	75 30/16	0.3
February	11.7	62	83	49	42	10	171 1964	3 1914	56 1/54	0.1
March	11.0	65	78	52	47	11	255 1946	7 1943	88 17/46	0.3
April	10.0	70	84	57	55	12	248 1960	2 1904	133 23/60	0.3
May	8.8	75	86	61	49	14	214 1958	4 1913	47 3/73	1.1
June	7.9	78	91	61	59	14	238 1954	7 (*c*)	147 7/54	1.7
July	7.6	78	87	72	54	15	157 1974	4 1950	64 18/22	1.4
August	7.9	73	86	59	49	16	161 1946	8 1892	58 *14/90*	0.7
September	8.3	66	81	52	52	15	201 1957	10 1951	156 15/57	0.2
October	9.1	62	74	52	64	17	193 1947	10 1914	66 4/06	0.1
November	9.6	59	73	49	56	14	188 1885	9 (*d*)	94 *30/85*	0.1
December	10.6	58	73	42	57	13	196 (*b*)	5 (*e*)	85 5/41	0.1
Year Totals	..	..	..	..	**633**	**162**	.. ..	.. ..	.. ..	**6.1**
Averages	**9.5**	**67**	..	..	..	..	.. ..	.. ..	.. ..	..
Extremes	..	..	**91**	**42**	..	..	**255 3/1946**	**2 4/1904**	**156 15/9/57**	..

(*a*) 1894–1970. (*b*) 1897 and 1916. (*c*) 1886 and 1967. (*d*) 1919 and 1921. (*e*) 1897, 1915 and 1931.

Figures such as 30/16, *12/99*, etc. indicate, in respect of the month of reference, the day and year of the occurrence. Dates in italics relate to nineteenth century.

Climatic data for selected Australian localities

The following table shows some of the more important climatic data for selected Australian localities.

CLIMATIC DATA FOR SELECTED AUSTRALIAN LOCALITIES

(Temperature and humidity generally over years 1957–1973)

	Rainfall			*Temperature*				*Relative humidity*			
Town	*No. of years of record*	*Average annual rainfall (mm)*	*Average number of wet days*	*Average maximum, January (°C.)*	*Average maximum, July (°C.)*	*Average minimum, January (°C.)*	*Average minimum, July (°C.)*	*Average 9 a.m., January*	*Average 9 a.m., July*	*Average 3 p.m., January (%)*	*Average 3 p.m., July (%)*
WESTERN AUSTRALIA											
Albany	94	948	184	25.8	15.7	13.3	7.4	73	84	65	70
Broome	63	574	38	33.3	28.5	26.2	13.6	75	46	62	43
Bunbury	97	881	122	26.9	16.7	16.5	9.1	63	78	59	69
Carnarvon	67	229	35	30.8	21.9	22.6	11.0	62	69	61	54
Esperance	85	675	128	25.9	17.0	15.9	7.9	70	81	63	65
Geraldton	86	462	78	31.6	19.4	18.7	9.2	61	68	60	57
Kalgoorlie	57	243	52	33.6	16.5	18.3	4.9	44	66	24	49
Meekatharra	51	236	36	37.8	18.6	24.2	7.3	29	62	17	37
Narrogin	82	506	96	30.9	14.5	14.7	5.3	58	84	33	67
Port Hedland	50	323	19	36.5	27.0	25.2	11.8	67	42	63	47
Wyndham	81	693	56	36.4	31.1	26.2	18.7	64	33	49	27
NORTHERN TERRITORY											
Alice Springs	100	266	33	36.6	21.8	22.2	4.8	31	49	19	30
Tennant Creek	100	362	33	37.7	24.4	24.8	11.1	46	39	25	24
SOUTH AUSTRALIA											
Ceduna	67	293	73	28.5	17.2	15.1	5.8	47	79	42	53
Mount Gambier	113	774	162	25.6	13.1	10.8	4.9	65	79	50	73
Oodnadatta	50	117	20	38.2	19.4	23.2	5.8	27	49	15	33
Port Augusta	101	242	60	32.3	16.6	19.5	7.1	44	66	31	49
Port Lincoln	108	486	125	25.5	15.9	15.7	8.4	65	79	54	66
Port Pirie	97	343	74	31.4	15.9	17.3	7.5	51	75	31	55
QUEENSLAND											
Atherton	72	1,412	135	28.8	21.6	18.3	10.0	76	78	65	56
Bundaberg	91	1,159	94	29.8	21.5	21.4	10.1	68	66	60	45
Cairns	76	2,224	141	31.5	25.4	23.6	16.7	71	72	62	58
Charleville	82	497	55	34.6	19.4	21.2	4.3	46	66	27	35
Charters Towers	90	650	63	33.6	24.4	21.7	10.5	65	63	42	47
Cloncurry	87	468	39	37.8	25.2	25.0	10.7	40	40	28	26
Ipswich	104	876	94	32.1	20.9	20.7	6.9	65	65	55	68
Longreach	80	442	46	37.9	23.0	22.7	6.9	43	53	26	28
Mackay	79	1,666	117	29.7	21.2	23.1	12.2	74	75	70	66
Maryborough	103	1,200	115	29.8	21.2	20.3	7.8	73	77	62	51
Normanton	102	932	57	35.4	29.2	25.0	15.2	71	44	53	27
Rockhampton	96	943	86	31.4	22.9	21.7	10.7	69	70	52	39
Roma	89	575	61	34.1	20.2	20.5	4.8	55	64	34	37
Toowoomba	102	955	105	26.9	16.2	16.5	4.7	73	79	53	48
Townsville	41	1,105	63	31.3	24.9	23.8	15.4	75	63	62	59
NEW SOUTH WALES											
Albury	96	705	96	30.8	12.0	14.1	3.0	45	74	24	67
Armidale	110	795	110	26.6	12.7	13.5	1.0	66	61	47	51
Bega	90	871	85	26.1	16.6	14.0	1.4	65	70	57	51
Bourke	102	346	46	35.0	18.0	20.7	4.8	41	64	28	40
Broken Hill	84	241	45	32.1	14.9	18.8	5.5	41	70	28	45
Cooma	109	503	90	25.7	9.3	11.1	−1.0	59	67	32	53
Dubbo	102	584	74	33.4	15.4	17.7	3.1	51	74	32	50
Goulburn	102	712	105	26.8	11.1	13.0	2.9	57	74	43	70
Grafton	93	983	104	31.7	20.3	19.5	5.5	72	75	58	45
Katoomba	86	1,405	122	23.4	9.3	12.9	2.9	61	71	60	65
Leeton	59	432	81	32.1	13.9	17.4	4.0	46	76	28	57
Moree	86	578	59	35.6	17.8	19.5	4.2	51	75	32	44
Newcastle	108	1,145	132	24.4	16.6	19.2	8.2	76	73	72	55
Orange	82	877	100	28.8	9.6	11.5	−0.3	58	84	49	64
Port Kembla	80	1,136	88	24.1	16.7	18.4	9.8	76	63	74	56
Tamworth	93	673	80	32.8	15.3	17.1	3.6	52	77	35	46
Taree	90	1,178	112	28.6	18.8	17.0	4.9	65	69	61	47
Wagga Wagga	101	554	88	31.1	12.3	16.4	3.2	50	77	34	67

CLIMATIC DATA FOR SELECTED AUSTRALIAN LOCALITIES—*continued*

	Rainfall			*Temperature*				*Relative humidity*			
Town	*No. of years of record*	*Average annual rainfall (mm)*	*Average number of wet days*	*Average maximum, January (°C.)*	*Average maximum, July (°C.)*	*Average minimum, January (°C.)*	*Average minimum, July (°C.)*	*Average 9 a.m., January*	*Average 9 a.m., July*	*Average 3 p.m., January (%)*	*Averag. 3 p.m. July (%)*
				VICTORIA							
Ballarat	91	744	161	25.5	9.9	11.4	3.5	59	81	40	74
Bendigo	112	546	123	29.2	11.9	14.4	3.7	50	75	32	65
Geelong	99	538	128	24.5	13.5	13.3	5.2	62	83	52	68
Horsham	99	449	102	30.8	13.5	12.9	4.1	45	77	26	63
Mildura	59	268	58	32.1	15.3	16.9	4.4	48	71	27	56
Sale	75	610	122	25.4	13.5	12.9	3.7	66	86	..	..
Seymour	92	596	94	27.8	11.5	12.9	3.4	52	79	35	73
Shepparton	95	509	89	30.2	13.2	15.2	3.3	51	77	..	..
Wangaratta	96	640	96	30.9	12.6	15.0	3.4	49	75	28	68
Warrnambool	76	726	169	23.2	13.6	13.1	5.9	73	83	62	71
				TASMANIA							
Burnie	83	990	158	18.4	12.4	12.2	4.7	66	83	59	2
Launceston	80	719	140	23.3	10.7	10.4	3.1	61	77	42	70
Zeehan	77	2,444	239	20.3	10.7	8.1	4.0	69	81	58	75

NOTE. The table on the next page gives the latitude, longitude, and altitude of the weather recording station at each of the above towns.

LOCATION CO-ORDINATES FOR SELECTED AUSTRALIAN LOCALITIES

Station	Lat.	Long.	Altitude (m)
Western Australia—			
Albany	34° 57′	117° 48′	69
Broome	17° 57′	122° 13′	12
Bunbury	33° 19′	115° 38′	1
Carnarvon	24° 35′	113° 39′	4
Esperance	33° 51′	121° 53′	4
Geraldton	28° 48′	114° 42′	28
Kalgoorlie	30° 46′	121° 27′	360
Meekatharra	26° 36′	118° 29′	517
Narrogin	32° 54′	117° 09′	351
Port Hedland	20° 23′	118° 37′	6
Wyndham	15° 31′	128° 09′	6
Northern Territory—			
Alice Springs	23° 48′	133° 53′	546
Tennant Creek	19° 38′	134° 11′	375
South Australia—			
Ceduna	32° 08′	133° 42′	17
Mount Gambier	37° 45′	140° 47′	63
Oodnadatta	27° 33′	135° 29′	113
Port Augusta	32° 33′	137° 47′	4
Port Lincoln	34° 47′	135° 53′	4
Port Pirie	33° 11′	138° 01′	3
Queensland—			
Atherton	17° 17′	145° 27′	752
Bundaberg	24° 52′	152° 21′	2
Cairns	16° 35′	145° 44′	3
Charleville	26° 25′	146° 17′	290
Charters Towers	20° 03′	146° 08′	306
Cloncurry	20° 40′	140° 30′	189
Ipswich	27° 38′	152° 44′	20
Longreach	23° 26′	144° 15′	187
Mackay	21° 07′	149° 10′	3
Maryborough	25° 32′	152° 42′	6
Normanton	17° 39′	141° 05′	10
Rockhampton	23° 23′	150° 29′	8
Roma	26° 36′	148° 42′	305
Queensland—*contd*			
Toowoomba	27° 33′	151° 57′	586
Townsville	19° 15′	146° 46′	3
New South Wales—			
Albury	36° 06′	146° 54′	183
Armidale	30° 32′	151° 38′	980
Bega	36° 40′	149° 50′	15
Bourke	30° 05′	145° 58′	107
Broken Hill	31° 57′	141° 28′	298
Cooma	36° 13′	149° 08′	838
Dubbo	32° 10′	148° 37′	262
Goulburn	34° 45′	149° 43′	632
Grafton	29° 41′	152° 56′	6
Katoomba	33° 43′	150° 19′	1,000
Leeton	34° 33′	146° 24′	151
Moree	29° 28′	149° 51′	207
Newcastle	32° 55′	151° 49′	37
Orange	33° 18′	149° 06′	869
Port Kembla	34° 29′	150° 55′	20
Tamworth	31° 05′	150° 56′	390
Taree	31° 54′	152° 28′	9
Wagga	35° 08′	147° 25′	219
Wollongong	34° 25′	150° 56′	46
Victoria—			
Ballarat	37° 35′	143° 50′	437
Bendigo	36° 46′	144° 17′	223
Geelong	38° 07′	144° 22′	17
Horsham	36° 40′	142° 12′	133
Mildura	34° 14′	142° 05′	48
Sale	38° 06′	147° 08′	15
Seymour	37° 02′	145° 08′	141
Shepparton	36° 23′	145° 24′	113
Wangaratta	36° 22′	146° 19′	150
Warrnambool	38° 24′	142° 29′	10
Tasmania—			
Burnie	41° 04′	145° 54′	4
Launceston	41° 33′	147° 13′	166
Zeehan	41° 54′	145° 23′	180

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Seasonal rainfall

1974 (December 1973 to November 1974)

The following is a summary of rainfall experienced during the four seasons, commencing December 1973 and ending November 1974. Plate 2, page 29, shows the rainfall distribution for 1974.

Summer 1973–74 (December 1973 to February 1974) Over the northern half of Western Australia rainfall was well above average with record falls over the North Kimberley district. In the Southern half of the State rainfall was average or less with the lowest falls on record in the North Central district of the Southwest.

The Northern Territory received very much above average rainfall in most parts, with record falls in the Alice Springs and the Barkly districts.

South Australia received much above average rainfall over most of the State with record falls over the far North district.

In Queensland very much above average rainfall was received in most of the State with record falls in many districts and the worst flooding this century occurred, notably in the Brisbane area.

Rainfall in New South Wales was chiefly very much above average with record falls over western districts and flooding on many rivers.

Victoria's rainfall was above average over most areas of the State with record falls in the lower and upper North districts. The West Gippsland district was below average.

Tasmania received average rainfall except on the east coast where it was below average.

Autumn 1974 (March 1974 to May 1974) Western Australia received very much above average rainfall in the Kimberley and in the Southwest districts, but average to much above average elsewhere.

In the Northern Territory very much above average rainfall was received over most parts, except for average totals in the Arnhem district.

South Australia's rainfall was very much above average over most of the State.

Rainfall in Queensland was mainly well above average in the North and average in the South.

New South Wales rainfall was very much above average in the western and in the coastal areas. Elsewhere rainfall was average to much above average.

Victoria rainfall was mainly well above average.

Tasmania received very much below average rainfall over the west coast, much above average over the east coast and average elsewhere.

Winter 1974 (*June 1974 to August 1974*) In Western Australia rainfall was very much above average in the Gascoyne districts and average to much above average elsewhere.

Nearly the whole of the Northern Territory received scattered rain in August.

In South Australia rainfall was average.

Queensland received well below average rainfall in most parts of the State with very much below average in the North Coast (Barrow) district.

New South Wales received chiefly average rainfall with much below average totals in the Northwest Plains and very much above average in the South Coast district.

Rainfall in Victoria was average in most areas and very much above average in East Gippsland.

Rainfall in Tasmania was above average with much above average totals towards the south coast.

Spring 1974 (*September 1974 to November 1974*) In Western Australia rainfall was average to very much above average, except for below average totals in the Central Coast district.

In the Northern Territory rainfall was very much above average over the south grading to average towards the north coast.

South Australia received very much above average rainfall over most parts of the State.

Queensland rainfall was mostly average with very much above average over Port Curtis (South Coast).

In New South Wales rainfall was very much above average over the Southwest, grading to average towards the coast.

Victoria received above average rainfall in most parts with very much above average in East Gippsland.

In Tasmania rainfall was about average with below average totals in the Derwent Valley.

Seasonal rainfall

1975 (*December 1974 to November 1975*)

The following is a summary of rainfall experienced during the four seasons commencing December 1974 and ending November 1975. Plate 3, page 30, shows the rainfall distribution for 1975.

Summer 1974–75 (*December 1974 to February 1975*) Western Australia recorded average rainfall or better in most areas with very much above totals over the Gascoyne districts and very much below over the Southwest Coast.

In the Northern Territory rainfall was above average or better in most areas with very much above average totals in the Barkly district.

South Australia received average rainfall or better in the north and below average in the south with very much below in the Murray districts.

Queensland rainfall was chiefly average with above average totals far to the west. There were a few pockets below average over the State.

In New South Wales rainfall was average in the north and mostly below average over the south, with very much below average totals over the Riverina districts.

In Victoria rainfall was very much below average in the Mallee and Wimmera districts, and elsewhere it was below average except for the Gippsland districts where totals were average.

Tasmania received average rainfall over the East Coast grading to very much above average towards the West Coast.

Autumn 1975 (*March 1975 to May 1975*) In Western Australia rainfall was average or better in most parts with well above average totals over the Murchison district. Exceptions were the Central Coast and West Kimberley districts where it was below average.

In the Northern Territory rainfall was mainly well above average with very much above average totals in the Darwin-Daly district.

In South Australia rainfall was average or better, except for well below average totals in the far North district.

Queensland rainfall was average over northern half and below average elsewhere.

New South Wales rainfall was chiefly well below average, except along the south coast where rainfall ranged from average to much above average.

In Victoria rainfall was below average in North Wimmera and West Central districts but elsewhere totals were average.

Tasmania rainfall was mostly very much above average and average over the East Coast and Midland districts.

Winter 1975 (*June 1975 to August 1975*) In the northern half of Western Australia rainfall was mostly average. In the southern half falls were below average grading to very much below in the Eucla district.

The Northern Territory received scattered rain in the Alice Springs district.

In South Australia rainfall was average over the northern half and well below average elsewhere.

In Queensland rainfall was about average or better in southern areas.

New South Wales received average rainfall over most parts of the State, except over the south coast where totals were well above average.

Victoria's rainfall was notably above average over most of the eastern half and deficient over most of the western half.

In Tasmania rainfall was well above average with very much above average totals in the southeast.

Spring 1975 (*September 1975 to November 1975*) In Western Australia rainfall was mostly very much above average with record falls in central areas. Totals were below average in the Central Coast district of the Southwest.

The Northern Territory received much above average rainfall over most parts.

South Australia recorded mainly very much above average rainfall with record totals in the Lower North district.

Queensland received much above average rainfall over the northern half and average or better over the southern half.

In New South Wales rainfall was very much above average over the western half with record totals over the southwest. Elsewhere rainfall was average or better.

In most of Victoria rainfall was very much above average with record falls in northwest areas.

Tasmania rainfall was average over the northwest grading to very much above average towards the southeast.

CHAPTER 3

GENERAL GOVERNMENT

Parliamentary government

Scheme of parliamentary government

Under Section 1 of the Commonwealth of Australia Constitution the legislative power of the Commonwealth is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate, and the House of Representatives. The Sovereign is represented throughout the Commonwealth by the Governor-General who, subject to the Constitution of the Commonwealth, has such powers and functions as the Sovereign is pleased to assign to him. In each State there is a State Governor who is the representative of the Sovereign for the State. He has such powers within the State as are conferred upon him by the Letters Patent constituting his office and he exercises these powers in accordance with instructions issued to him by the Sovereign, detailing the manner in which his duties are to be fulfilled.

The Legislature in each State was bicameral until 1922, when the Queensland Parliament became unicameral with the abolition of the Upper House. In Queensland the sole legislative chamber is known as the Legislative Assembly. The Upper House is known in the Commonwealth Parliament as the Senate, and in the bicameral State Parliaments as the Legislative Council. The Lower House is known in the Commonwealth Parliament as the House of Representatives, in the State Parliaments of New South Wales, Victoria and Western Australia as the Legislative Assembly, and in the State Parliaments of South Australia and Tasmania as the House of Assembly. The extent of the legislative powers of the Parliaments is defined by the Commonwealth and State Constitutions. In those States that have a bicameral legislature the Legislative Assembly or House of Assembly is the larger House.

The members of the Legislative Assembly or House of Assembly, as the case may be, of each State are elected by the people, the franchise extending to British subjects who are at least 18 years of age with certain residential qualifications. With the exception of the New South Wales Legislative Council, the members of State Legislative Councils are, in common with members of the Lower Houses, elected by the people of the respective States. In New South Wales a quarter of the members of the Legislative Council retire each three years, and the continuing members of the Council and the members of the Legislative Assembly, voting as an electoral body, elect members to fill the vacant positions. In Victoria, and Tasmania members of the Legislative Council are elected by adult suffrage, while the franchise is limited in South Australia to the holders of certain property or service qualifications and their spouses. In the Commonwealth Parliament the qualifications for the franchise are identical for both Houses, extending to British subjects who have lived in Australia for six months continuously and who are not less than 18 years of age.

The Sovereign

On 7 February 1952 the Governor-General and members of the Federal Executive Council proclaimed Princess Elizabeth Queen Elizabeth the Second, Queen of this Realm and of all Her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. The coronation of Her Majesty in Westminster Abbey took place on 2 June 1953. By the *Royal Style and Titles Act* 1973, which Her Majesty assented to in Canberra on 19 October 1973, the Parliament of the Commonwealth assented to the adoption by Her Majesty, for use in relation to Australia and its Territories, of the Style and Titles set forth in the Schedule to the Act. On the same day, also in Canberra, Her Majesty issued a Proclamation, under the Great Seal of Australia, appointing and declaring that Her Majesty's Style and Titles should henceforth be, in relation to Australia and its Territories, ' Elizabeth the Second, by the Grace of God Queen of Australia and Her other Realms and Territories, Head of the Commonwealth '.

The Governor-General

Powers and functions. As the Queen's representative in Australia, the Governor-General exercises certain prerogative powers and functions assigned to him by the Queen. Other powers and function are conferred on him by the Constitution. Powers which have been so assigned or conferred include, among others, the power to grant pardons and to remit fines for offences against the laws of the

Commonwealth to appoint certain officers in the Diplomatic or Consular Service; to appoint times for holding the sessions of the Parliament, prorogue Parliament, and dissolve the House of Representatives; to cause writs to be issued for general elections of members of the House of Representatives; to assent in the Queen's name to a proposed law passed by both Houses of the Parliament or withhold assent, or to reserve the law for the Queen's pleasure, or to return the proposed law to the House in which it originated and transmit therewith any amendments which he may recommend; to exercise executive power; to choose and summon Executive Councillors, who hold office during his pleasure; and to appoint Ministers of State for the Commonwealth. In addition, the command-in-chief of the defence forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

Many Acts of the Commonwealth Parliament provide that the Governor-General may make regulations to give effect to the Act. The Governor-General may also be authorised by statute to issue proclamations—for example, to declare an Act in force. He has been given power by statute to legislate for certain of the Commonwealth Territories. Under the conventions of responsible government obtaining in British Commonwealth countries, the Governor-General's functions are exercised generally on the advice of Ministers of State.

Holders of office. The following list shows the names of the Governors-General since the inception of the Commonwealth of Australia.

GOVERNORS-GENERAL

Rt Hon. John Adrian Louis, Earl of Hopetoun (afterwards Marquis of Linlithgow), P.C., K.T., G.C.M.G., G.C.V.O. From 1 January 1901 to 9 January 1903.

Rt Hon. Hallam, Baron Tennyson, P.C., G.C.M.G. From 17 July 1902 to 9 January 1903 (Acting).

Rt Hon. Hallam, Baron Tennyson, P.C., G.C.M.G. From 9 January 1903 to 21 January 1904.

Rt Hon. Henry Stafford, Baron Northcote, P.C., G.C.M.G., G.C.I.E., C.B. From 21 January 1904 to 9 September 1908.

Rt Hon. William Humble, Earl of Dudley, P.C., G.C.B., G.C.M.G., G.C.V.O. From 9 September 1908 to 31 July 1911.

Rt Hon. Thomas, Baron Denman, P.C., G.C.M.G., K.C.V.O. From 31 July 1911 to 18 May 1914.

Rt Hon. Sir Ronald Craufurd Munro-Ferguson (afterwards Viscount Novar of Raith), G.C.M.G. From 18 May 1914 to 6 October 1920.

Rt Hon. Henry William, Baron Forster of Lepe, P.C., G.C.M.G. From 6 October 1920 to 8 October 1925.

Rt Hon. John Lawrence, Baron Stonehaven (afterwards 1st Viscount Stonehaven), P.C., G.C.M.G., D.S.O. From 8 October 1925 to 22 January 1931.

Rt Hon. Sir Isaac Alfred Isaacs, G.C.B., G.C.M.G., K.C. From 22 January 1931 to 23 January 1936.

Brigadier-General the Rt Hon. Alexander Gore Arkwright, Baron Gowrie (afterwards 1st Earl of Gowrie), V.C., P.C., G.C.M.G., C.B., D.S.O., K.G.St.J. From 23 January 1936 to 30 January 1945.

His Royal Highness Prince Henry William Frederick Albert, Duke of Gloucester, Earl of Ulster and Baron Culloden, K.G., P.C., K.T., K.P., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Personal Aides-de-Camp. From 30 January 1945 to 11 March 1947.

Rt Hon. Sir William John McKell, G.C.M.G., Q.C. From 11 March 1947 to 8 May 1953.

Field Marshal Sir William Joseph Slim (afterwards Viscount Slim of Yarralumla), K.G., G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.St.J. From 8 May 1953 to 2 February 1960.

Rt Hon. William Shepherd, Viscount Dunrossil, P.C., G.C.M.G., M.C., K.St.J., Q.C. From 2 February 1960 to 3 February 1961.

Rt Hon. William Philip, Viscount De Lisle, V.C., P.C., G.C.M.G., G.C.V.O., K.St.J. From 3 August 1961 to 22 September 1965.

Rt Hon. Richard Gardiner, Baron Casey, K.G., P.C., G.C.M.G., C.H., D.S.O., M.C., K.St.J. From 22 September 1965 to 30 April 1969.

Rt Hon. Sir Paul Hasluck, G.C.M.G., G.C.V.O., K.St.J. From 30 April 1969 to 11 July 1974.

Hon. Sir John Robert Kerr, A.K., G.C.M.G., K.St.J., Q.C. From 11 July 1974.

Administrators. In addition to the holders of the office of Governor-General listed above, certain persons have, from time to time, been appointed as Administrator. Administrators are appointed in the event of the death, illness, or absence from Australia of the Governor-General, or for the period between the departure of a Governor-General and the arrival of his successor. The following is a list of such appointments.

ADMINISTRATORS

Rt Hon. FREDERIC JOHN NAPIER, BARON CHELMSFORD (afterwards 1ST VISCOUNT CHELMSFORD), K.C.M.G. From 21 December 1909 to 27 January 1910.

Lieut.-Colonel the Rt Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C. From 3 October 1930 to 22 January 1931.

Captain the Rt Hon. WILLIAM CHARLES ARCEDECKNE, BARON HUNTINGFIELD, K.C.M.G., K.St.J. From 29 March 1938 to 24 September 1938.

Major-General SIR WINSTON JOSEPH DUGAN (afterwards 1ST BARON DUGAN OF VICTORIA), G.C.M.G., C.B., D.S.O., From 5 September 1944 to 30 January 1945; 19 January 1947 to 11 March 1947.

General* SIR JOHN NORTHCOTT, K.C.M.G., K.C.V.O., C.B. From 19 July 1951 to 14 December 1951; 30 July 1956 to 22 October 1956.

General SIR REGINALD ALEXANDER DALLAS BROOKS, K.C.B., K.C.M.G.†, K.C.V.O., D.S.O., K.St.J. From 8 January 1959 to 16 January 1959; 4 February 1961 to 3 August 1961; 5 June 1962 to 3 October 1962; 21 November 1962 to 18 December 1962.

General SIR ERIC WINSLOW WOODWARD, K.C.M.G., K.C.V.O., C.B., C.B.E., D.S.O., K.St.J. From 16 June 1964 to 30 August 1964.

Colonel SIR HENRY ABEL SMITH, K.C.M.G., K.C.V.O., D.S.O., K.St.J. From 7 May 1965 to 22 September 1965.

Lieut.-General SIR EDRIC MONTAGUE BASTYAN, K.C.M.G., K.C.V.O., K.B.E., C.B. From 24 April 1967 to 1 June 1967.

Major-General SIR ROHAN DELACOMBE, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O., K.ST.J. From 11 February 1971 to 18 February 1971; 12 October 1971 to 19 October 1971; 29 June 1972 to 9 August 1972; 5 April 1974 to 8 April 1974.

SIR ARTHUR RODEN CUTLER, V.C., K.C.M.G., K.C.V.O., C.B.E., K.ST.J. From 20 February 1975 to 13 March 1975; 12 May 1975 to 24 May 1975; 16 September 1975 to 17 September 1975; 23 December 1975 to 3 February 1976.

Governors of the States

Powers and functions. The Queen is represented in each of the States by a Governor, the office having been constituted by Letters Patent under the Great Seal of the United Kingdom of various dates. The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their Commissions of appointment, and the Governor's Instructions given them under the Royal Sign Manual and Signet or other instrument as specified in the Letters Patent. In addition, they have been invested with various statutory functions by State Constitutions and other Imperial Acts and by Acts of the Parliaments of the States.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State, except those reserved for the Royal assent. The latter include certain classes of Bills which are regulated by the Constitution Acts and by the Governor's Instructions. He administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown. In the performance of his functions generally, particularly those conferred by Statute, the Governor of a State acts on the advice of Ministers of State for the State.

Holders of office. The names of the present (July 1976) State Governors are as follows:

STATE GOVERNORS, JULY 1976

New South Wales—SIR ARTHUR RODEN CUTLER, V.C., K.C.M.G., K.C.V.O., C.B.E., K.ST.J.
Victoria—SIR HENRY ARTHUR WINNEKE, K.C.M.G., O.B.E., K.ST.J., Q.C.
Queensland—AIR MARSHAL SIR COLIN THOMAS HANNAH, K.C.M.G., K.B.E., C.B., K.ST.J.
South Australia—SIR MARK LAURENCE ELWIN OLIPHANT, K.B.E., K.ST.J.
Western Australia—AIR CHIEF MARSHAL SIR WALLACE HART KYLE, G.C.B., C.B.E., D.S.O. D.F.C., K.ST.J.
Tasmania—SIR STANLEY CHARLES BURBURY, K.B.E., K.ST.J.

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* Lieutenant-General Sir John Norcott was granted honorary rank of General while administering the Government of the Commonwealth. † G.C.M.G., 1963

The Cabinet and executive government

Both in the Commonwealth and the States, executive government is based on the system which was evolved in Britain in the 18th Century, and which is generally known as 'Cabinet' or 'responsible' government. Its essence is that the head of the State (Her Majesty the Queen, and her representative the Governor-General or Governor) should perform governmental acts on the advice of her Ministers; that her Ministers of State should be appointed from members of Parliament belonging to the party, or coalition of parties, commanding a majority in the lower House; that the Ministry should be collectively responsible to that House for the Government of the country; and that the Ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs, or understandings, and through institutions that do not form part of the legal structure of the government at all. The Commonwealth and State Constitutions make fuller legal provision for the Cabinet system than the British Constitution does—for example, by requiring that Ministers shall either be, or within a prescribed period become, members of the Legislature. In general, however, the legal structure of the executive government remains the same as it was before the establishment of the Cabinet system.

The executive power of the Commonwealth is exercisable by the Governor-General, and that of the States by the Governor. In each case he is advised by an Executive Council, which, however, meets only for certain formal purposes, as explained below. The whole policy of a Ministry is, in practice, determined by some or all of the Ministers of State, meeting without the Governor-General or Governor, under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

The Cabinet. The Cabinet of the Liberal/National Country Party Coalition Government comprises the twelve senior Ministers. Other Ministers attend meetings of Cabinet only when required. Meetings of the full Ministry are held when deemed necessary. There are six Standing Committees of the Cabinet with varying numbers of Cabinet and non-Cabinet Ministers. In Labor Governments all Ministers have been members of Cabinet. Cabinet meetings are private and deliberative and records of meetings are not made public. The Cabinet does not form part of the legal mechanisms of Government; the decisions it takes have, in themselves, no legal effect. As Ministers are the leaders of the party or parties commanding a majority in the lower House, the Cabinet substantially controls, in ordinary circumstances, not only the general legislative program of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the country.

The Executive Council. This body is usually presided over by the Governor-General or Governor, the members thereof holding office during his pleasure. All Ministers of State must be members of the Executive Council. In the case of the Commonwealth Government and also in the case of the States of Victoria and Tasmania, Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the Cabinet system that attendance should be limited to the Ministers of the day. The Meetings of the Executive Council are formal and official in character, and a record of proceedings is kept by the Secretary or Clerk. At Executive Council meetings the decisions of the Cabinet are, where necessary, given legal form, appointments made, resignations accepted, proclamations issued, and regulations and the like approved.

The appointment of Ministers. Legally, Ministers hold office during the pleasure of the Governor-General or Governor. In practice, however, the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns, the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command, a majority in the Lower House, and to commission him, as Prime Minister or Premier, to 'form a Ministry'—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

Ministers in Upper and Lower Houses. The following table shows the distribution of Ministers in the Houses of each Parliament in July 1976.

AUSTRALIAN PARLIAMENTS: MINISTERS IN UPPER OR LOWER HOUSES JULY 1976

Ministers with seats in—	*Commonwealth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
The Upper House	6	1	6	(*a*)	3	4	1	21
The Lower House	18	17	12	18	9	9	9	92
Total	**24**	**18**	**18**	**18**	**12**	**13**	**10**	**113**

(*a*) Abolished in 1922.

Commonwealth Government Ministeries

Names and tenure of office, 1901 to 1976. The following list shows the name of each Commonwealth Government Ministry to hold office since 1 January 1901, and the limits of its term of office.

COMMONWEALTH GOVERNMENT MINISTRIES, 1901 TO JULY 1976

(i) BARTON MINISTRY, 1 January 1901 to 24 September 1903.
(ii) DEAKIN MINISTRY, 24 September 1903 to 27 April 1904.
(iii) WATSON MINISTRY, 27 April 1904 to 17 August 1904.
(iv) REID-MCLEAN MINISTRY, 18 August 1904 to 5 July 1905.
(v) DEAKIN MINISTRY, 5 July 1905 to 13 November 1908.
(vi) FISHER MINISTRY, 13 November 1908 to 1 June 1909.
(vii) DEAKIN MINISTRY, 2 June 1909 to 29 April 1910.
(viii) FISHER MINISTRY, 29 April 1910 to 24 June 1913.
(ix) COOK MINISTRY, 24 June 1913 to 17 September 1914.
(x) FISHER MINISTRY, 17 September 1914 to 27 October 1915
(xi) HUGHES MINISTRY, 27 October 1915 to 14 November 1916.
(xii) HUGHES MINISTRY, 14 November 1916 to 17 February 1917.
(xiii) HUGHES MINISTRY, 17 February 1917 to 10 January 1918.
(xiv) HUGHES MINISTRY, 10 January 1918 to 9 February 1923.
(xv) BRUCE-PAGE MINISTRY; 9 February 1923 to 22 October 1929.
(xvi) SCULLIN MINISTRY, 22 October 1929 to 6 January 1932.
(xvii) LYONS MINISTRY, 6 January 1932 to 7 November 1938.
(xviii) LYONS MINISTRY, 7 November 1938 to 7 April 1939.
(xix) PAGE MINISTRY, 7 April 1939 to 26 April 1939.
(xx) MENZIES MINISTRY, 26 April 1939 to 14 March 1940.
(xxi) MENZIES MINISTRY, 14 March 1940 to 28 October 1940.
(xxii) MENZIES MINISTRY, 28 October 1940 to 29 August 1941.
(xxiii) FADDEN MINISTRY, 29 August 1941 to 7 October 1941.
(xxiv) CURTIN MINISTRY, 7 October 1941 to 21 September 1943.
(xxv) CURTIN MINISTRY, 21 September 1943 to 6 July 1945.
(xxvi) FORDE MINISTRY, 6 July 1945 to 13 July 1945.
(xxvii) CHIFLEY MINISTRY, 13 July 1945 to 1 November 1946.
(xxviii) CHIFLEY MINISTRY, 1 November 1946 to 19 December 1949.
(xxix) MENZIES MINISTRY, 19 December 1949 to 11 May 1951.
(xxx) MENZIES MINISTRY, 11 May 1951 to 11 January 1956.
(xxxi) MENZIES MINISTRY, 11 January 1956 to 10 December 1958.
(xxxii) MENZIES MINISTRY, 10 December 1958 to 18 December 1963.
(xxxiii) MENZIES MINISTRY, 18 December 1963 to 26 January 1966.
(xxxiv) HOLT MINISTRY, 26 January 1966 to 14 December 1966.
(xxxv) HOLT MINISTRY, 14 December 1966 to 19 December 1967.
(xxxvi) MCEWEN MINISTRY, 19 December 1967 to 10 January 1968.
(xxxvii) GORTON MINISTRY, 10 January 1968 to 28 February 1968.
(xxxviii) GORTON MINISTRY, 28 February 1968 to 12 November 1969.
(xxxix) GORTON MINISTRY, 12 November 1969 to 10 March 1971.
(xl) MCMAHON MINISTRY, 10 March 1971 to 5 December 1972.
(xli) WHITLAM MINISTRY, 5 December 1972 to 19 December 1972.
(xlii) WHITLAM MINISTRY, 19 December 1972 to 11 November 1975.
(xliii) FRASER MINISTRY, 11 November 1975 to 22 December 1975.
(xliv) FRASER MINISTRY, 22 December 1975

Names of Members of each Ministry to 8 July 1976. In Year Book No. 17, 1924, the names are given of each Ministry up to the Bruce-Page Ministry (9 February 1923 to 22 October 1929,) together with the names of the successive holders of portfolios therein, and issue No. 39 contains a list, commencing with the Bruce-Page Ministry, which covers the period between the date on which it assumed power, 9 February 1923, and 31 July 1951, showing the names of all persons who held office in each Ministry during that period. The names of members of subsequent Ministries are listed in successive issues of the Year Book after No. 39.

This issue shows only particulars of the First Fraser Ministry and the Second Fraser Ministry (at 8 July 1976).

THE FIRST FRASER MINISTRY

(The State in which each Minister's electorate is situated and party affiliation are shown in parenthesis. Party affiliation is indicated by the use of the following abbreviations: L.P. Liberal Party of Australia; N.C.P. National Country Party of Australia).

Prime Minister—
THE HON. J. M. FRASER, M.P. (Vic.) (L.P.)

Deputy Prime Minister, Minister for Overseas Trade and Minister for Minerals and Energy—
THE RT HON. J. D. ANTHONY, M.P. (N.S.W.) (N.C.P.)

Treasurer—
THE HON. P. R. LYNCH, M.P. (Vic.) (L.P.)

Minister for Agriculture and Minister for Northern Australia—
THE HON. I. McC. SINCLAIR, M.P. (N.S.W.) (N.C.P.)

Special Minister of State, Minister for the Capital Territory, Minister for the Media, Minister for Tourism and Recreation and Vice-President of the Executive Council—
SENATOR THE HON. R. G. WITHERS (W.A.) (L.P.)

Attorney-General and Minister for Police and Customs—
SENATOR THE HON. I. J. GREENWOOD, Q.C. (Vic.) (L.P.)

Minister for Manufacturing Industry and Minister for Science and Consumer Affairs—
SENATOR THE HON. R. C. COTTON (N.S.W.) (L.P.)

Minister for Transport and Postmaster-General—
THE HON. P. J. NIXON, M.P. (Vic.) (N.C.P.)

Minister for Foreign Affairs and Minister for Environment—
THE HON. A. S. PEACOCK, M.P. (Vic.) (L.P.)

Minister for Social Security, Minister for Health and Minister for Repatriation and Compensation–
THE HON. D. L. CHIPP, M.P. (Vic.) (L.P.)

Minister for Defence—
THE HON. D. J. KILLEN, M.P. (Qld) (L.P.)

Minister for Aboriginal Affairs and Minister for Administrative Services—
SENATOR THE HON. T. C. DRAKE-BROCKMAN, D.F.C. (W.A.) (N.C.P.)

Minister for Housing and Construction and Minister for Urban and Regional Development—
SENATOR THE HON. J. L. CARRICK (N.S.W.) (L.P.)

Minister for Labor and Immigration—
THE HON. A. A. STREET, M.P. (Vic.) (L.P.)

Minister for Education—
SENATOR THE HON. MARGARET G. C. GUILFOYLE (Vic.) (L.P.)

THE SECOND FRASER MINISTRY—AT 8 JULY 1976

(For abbreviations *see* headnote to first Fraser Ministry)

**Prime Minister—*
The Rt Hon. J. M. Fraser, M.P. (Vic.) (L.P.)

**Deputy Prime Minister, Minister for National Resources and Minister for Overseas Trade—*
The Rt Hon. J. D. Anthony, M.P. (N.S.W.) (N.C.P.)

**Treasurer—*
The Hon. P. R. Lynch, M.P. (Vic.) (L.P.)

**Minister for Primary Industry and Leader of the House—*
The Hon. I. McC. Sinclair, M.P. (N.S.W.) (N.C.P.)

**Minister of Administrative Services, Vice-President of the Executive Council and Leader of the Government in the Senate—*
Senator The Hon. R. G. Withers (W.A.) (L.P.)

**Minister for Industry and Commerce—*
Senator The Hon. R. C. Cotton (N.S.W.) (L.P.)

**Minister for Employment and Industrial Relations and Minister Assisting the Prime Minister in Public Service Matters—*
The Hon. A. A. Street, M.P. (Vic.) (L.P.)

**Minister for Transport—*
The Hon. P. J. Nixon, M.P. (Vic.) (N.C.P.)

**Minister for Education and Minister Assisting the Prime Minister in Federal Affairs—*
Senator The Hon. J. L. Carrick (N.S.W.) (L.P.)

**Minister for Foreign Affairs—*
The Hon. A. S. Peacock, M.P. (Vic.) (L.P.)

**Minister for Defence—*
The Hon. D. J. Killen, M.P. (Qld) (L.P.)

**Minister for Social Security—*
Senator The Hon. Margaret G. C. Guilfoyle (Vic.) (L.P.)

Attorney-General—
The Hon. R. J. Ellicott, Q.C., M.P. (N.S.W.) (L.P.)

Minister for Business and Consumer Affairs—
The Hon. J. W. Howard, M.P. (N.S.W.) (L.P.)

Minister for Health—
The Hon. R. J. D. Hunt, M.P. (N.S.W.) (N.C.P.)

Minister for Immigration and Ethnic Affairs—
The Hon M. J. R. MacKellar, M.P. (N.S.W.) (L.P.)

Minister for Aboriginal Affairs—
The Hon. R. I. Viner, M.P. (W.A.) (L.P.)

Minister for the Northern Territory and Minister Assisting the Minister for National Resources—
The Hon. A. E. Adermann, M.P. (Qld) (N.C.P.)

Minister for Post and Telecommunications and Minister Assisting the Treasurer—
The Hon. E. L. Robinson, M.P. (Qld) (L.P.)

Minister for Construction and Minister Assisting the Minister for Defence—
The Hon. J. E. McLeay, M.P. (S.A.) (L.P.)

Minister for Environment, Housing and Community Development—
The Hon. K. E. Newman, M.P. (Tas.) (L.P.)

Minister for Science—
Senator The Hon. J. J. Webster (Vic.) (N.C.P.)

Minister for the Capital Territory—
The Hon. A. A. Staley, M.P. (Vic.) (L.P.)

Minister for Repatriation—
Senator The Hon. P. D. Durack (W.A.) (L.P.)

* Minister in the Cabinet.

State Premiers, July 1976

The names of the Premiers of each State in July 1976 are shown below.

STATE PREMIERS, JULY 1976†

New South Wales—The Hon. N. K. Wran, Q.C., M.L.A. (A.L.P.)
Victoria—The Hon. R. J. Hamer, E.D., M.L.A. (L.P.)
Queensland—The Hon. J. Bjelke-Petersen, M.L.A. (C.P.)
South Australia—The Hon. D. A. Dunstan, Q.C., M.P. (A.L.P.)
Western Australia—The Hon. Sir Charles Court, O.B.E., M.L.A. (L.P.)
Tasmania—The Hon. W. A. Neilson, M.H.A. (A.L.P.)

Leaders of the Opposition, Commonwealth and State Parliaments, July 1976

The Leader of the Opposition plays an important part in the Party system of government which operates in the Australian Parliaments. The following list gives the names of the holders of this position in each of the Parliaments in July 1976.

LEADERS OF THE OPPOSITION, JULY 1976†

Commonwealth—The Hon. E. G. Whitlam, Q.C., M.P. (A.L.P.)
New South Wales—Sir Eric Willis, K.B.E., C.M.G., M.L.A. (L.P.)
Victoria—A. C. Holding, M.L.A. (A.L.P.)
Queensland—T. J. Burns, M.L.A. (A.L.P.)
South Australia—Dr D. O. Tonkin, M.P. (L.P.)
Western Australia—The Hon. C. J. Jamieson, M.L.A. (A.L.P.)
Tasmania—The Hon. E. M. Bingham, Q.C., M.H.A. (L.P.)

Numbers and salaries of Commonwealth Government Ministers

Under Sections 65 and 66, respectively, of the Constitution of the Commonwealth of Australia the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000 ($24,000), each provision to operate, however, 'until the Parliament otherwise provides'.

Subsequently the number and salaries have been increased from time to time, and at July 1976 the annual sum payable for salaries is $407,700 and the number of Ministers is twenty-four. An additional ministerial allowance of $10,900 a year is payable to the Prime Minister, and an additional ministerial allowance of $5,200 a year to the Deputy Prime Minister and $4,875 a year to other Ministers.

All amounts payable in the foregoing paragraphs are in addition to amounts payable as Parliamentary allowances (*see* page 93).

Parliaments and elections

The Commonwealth Parliaments

The first Parliament of the Commonwealth of Australia was convened by proclamation dated 29 April 1901 by His Excellency the Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9 May 1901 by H.R.H. the Duke of Cornwall and York. The Rt Hon. Sir Edmund Barton, G.C.M.G., K.C., was Prime Minister.

The following table shows the number and duration of Parliaments since federation.

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† Full titles of party abbreviations are shown on page 88.

COMMONWEALTH PARLIAMENTS

Number of Parliament	*Date of opening*	*Date of dissolution*
First	9 May 1901	23 November 1903
Second	2 March 1904	5 November 1906
Third	20 February 1907	19 February 1910
Fourth	1 July 1910	23 April 1913
Fifth	9 July 1913	30 July 1914(*a*)
Sixth	8 October 1914	26 March 1917
Seventh	14 June 1917	3 November 1919
Eighth	26 February 1920	6 November 1922
Ninth	28 February 1923	3 October 1925
Tenth	13 January 1926	9 October 1928
Eleventh	6 February 1929	16 September 1929
Twelfth	20 November 1929	27 November 1931
Thirteenth	17 February 1932	7 August 1934
Fourteenth	23 October 1934	21 September 1937
Fifteenth	30 November 1937	27 August 1940
Sixteenth	20 November 1940	7 July 1943
Seventeenth	23 September 1943	16 August 1946
Eighteenth	6 November 1946	31 October 1949
Nineteenth	22 February 1950	19 March 1951(*a*)
Twentieth	12 June 1951	21 April 1954
Twenty-first	4 August 1954	4 November 1955
Twenty-second	15 February 1956	14 October 1958
Twenty-third	17 February 1959	2 November 1961
Twenty-fourth	20 February 1962	1 November 1963
Twenty-fifth	25 February 1964	31 October 1966
Twenty-sixth	21 February 1967	29 September 1969
Twenty-seventh	25 November 1969	2 November 1972
Twenty-eighth	27 February 1973	11 April 1974(*a*)
Twenty-ninth	9 July 1974	11 November 1975(*a*)
Thirtieth	17 February 1976	

(*a*) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General under section 57 of the Constitution.

There have been twenty-nine complete Parliaments since Federation. Until 1927 the Parliament met in Melbourne; it now meets in Canberra, the first meeting at Parliament House, Canberra, being opened by the Duke of York on 9 May 1927.

The twenty-ninth Parliament opened on 9 July 1974 and ended on 11 November 1975 when a dissolution of both the Senate and the House of Representatives was granted by the Governor-General under Section 57 of the Constitution. The date of elections for both Houses was fixed for 13 December 1975. Writs were issued by the Governor-General on 17 November 1975 for the House of Representatives elections in all States and Territories (except South Australia and Western Australia, for which States the writs were issued on 21 November 1975). State Governors issued writs for the Senate elections on the same dates as those issued for the House of Representatives elections in the respective States. On 17 November 1975 the Governor-General issued the writs for the Senate elections in the Australian Capital Territory and Northern Territory. For voting figures *see* page 88. For particulars of electors enrolled and of electors who voted in the several States and Territories at previous Commonwealth elections for Parliament *see* Year Book No. 60 and earlier issues.

A special article describing the Commonwealth Parliament, its functions and procedure, prepared by the Clerk of the Senate and the Clerk of the House of Representatives, appears in Year Book No. 49, pages 65–71.

Qualifications for membership and for franchise—Commonwealth Parliament

Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, eighteen years of age or over and not disentitled on other grounds, who has resided in Australia for at least three years and who is, or is qualified to become an elector of the Commonwealth Parliament. Qualifications for Commonwealth Parliament franchise are possessed by any British subject, not under eighteen years of age and not disentitled on other grounds, who has lived in Australia for six months continuously. Residence in a Subdivision for a period of on month prior to enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory except that the compulsory enrolment provisions do not relate to an Aboriginal native of Australia. A member of the Defence Force on service outside Australia who is not less than eighteen years of age, is a British subject and has lived in Australia for six months continuously is entitled to vote at Commonwealth Parliament elections even though he may not be enrolled.

The principal reasons for disqualification of persons otherwise eligible for election as members of either Commonwealth House are. membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding an office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the public service of the Commonwealth Government except as a member of an incorporated company of more than twenty-five persons. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer, or persons who are holders of temporary entry permits under the *Migration Act* 1958 or are prohibited immigrants under that Act are excluded from the franchise. In the main, these or similar grounds for disqualification apply also to State Parliament membership and franchise. Aborigines are entitled to enrol and to vote at both Commonwealth and State elections in all States.

Commonwealth Parliaments and elections

From the establishment of the Commonwealth of Australia until 1949 the Senate consisted of thirty-six members, six being returned by each of the original federating States. The Constitution empowers Parliament to increase or decrease the size of the Parliament, and, as the population of Australia had more than doubled since its inception, the Parliament passed the *Representation Act* 1948 which provided that there should be ten Senators from each State instead of six, increasing the total to sixty Senators, thus enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation.

The *Senate* (*Representation of Territories*) *Act* 1973 (No. 39 of 1974), assented to on 7 August 1974, made provision for two Senators to be elected from both the Northern Territory and the Australian Capital Territory at the same time as the next election of Senators for a State or a general election for the House of Representatives, whichever first occurred. Consequently, at the election on 13 December 1975, 2 Senators were elected from each Territory, and the number of Senators increased to 64.

In accordance with the Constitution the total number of members of the House of Representatives must be as nearly as practicable double that of the Senate. Consequently, in terms of the Constitution and the Representation Act, from the date of the 1949 elections the number of members in the House of Representatives was increased from 74 to 121 (excluding the members for the internal Territories). As the States are represented in the House of Representatives on a population basis, the numbers were increased as follows: New South Wales—from 28 to 47; Victoria—from 20 to 33, Queensland—from 10 to 18; South Australia—from 6 to 10; and Western Australia—from 5 to 8. Tasmania's representation remained at 5 (the Constitution provides for a minimum of 5 members for each Original State). The increase in the number of members of Parliament necessitated a redistribution of seats and a redetermination of electoral boundaries. Redistributions are carried out by Distribution Commissioners appointed for each State. The redistributions are effected on a quota basis, but taking into account community interests, means of communication, physical features, existing boundaries, and other factors.

The population as disclosed by the Census taken on 30 June 1954 necessitated a futher alteration in representation in the House of Representatives in respect of New South Wales, South Australia, and Western Australia. Representation as from the general election for the House of Representatives on 10 December 1955 was: New South Wales 46, Victoria 33, Queensland 18, South Australia 11, Western Australia 9, Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 121 to 122.

The population as disclosed by the Census taken on 30 June 1961 revealed that, under the provisions of the Representation Act, New South Wales, Queensland, and Western Australia would each lose one member in the House of Representatives, while Victoria would gain a member. The Distribution Commissioners' reports were duly laid before both Houses of Parliament, but the Government decided not to proceed with the proposals and announced that it would amend the Representation Act. In November 1964 the formula provided by Section 10 of the Representation Act for determining the number of members of the House of Representatives was amended so as to give a State an additional member for 'any portion of a quota'. The effect of that amendment would have been that at the next redistribution Victoria and South Australia would each gain one member while all other States would retain their existing representation. However, no fresh redistribution was effected prior to the 1966 Census. Consequent upon the population changes disclosed by the Census taken on 30 June 1966, a redistribution of the State electoral division boundaries was carried out in

1968 and the following representation in the House of Representatives became effective as from the general election held on 25 October 1969: New South Wales 45, Victoria 34, Queensland 18, South Australia 12, Western Australia 9 and Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 122 to 123.

The population as disclosed by the Census taken on 30 June 1971 revealed that, under the provisions of the Representation Act, Western Australia would gain an additional member of the House of Representatives as from the next general elections following a redistribution of the electoral boundaries in that State. Subsequently, Distribution Commissioners for that State were appointed, and published their final recommendations on 13 February 1974. These recommendations, redistributing Western Australia into ten electoral Divisions for the House of Representatives, were approved by Parliament in April 1974. The new electoral boundaries were proclaimed by the Governor-General on 19 April 1974. A High Court judgment of 1 December 1975 indicated that the Representation Act fails to ensure that the determination of the number of Members of the House of Representatives to be chosen by the States in proportion to their populations will be effectively made in each triennial period. The decision of the Court was to the effect that—

> Part III of the Commonwealth Electoral Act relating to the distribution of States into Electoral Divisions was not invalid; and
>
> Sections 3, 4 and 12A of the Representation Act were invalid.

Amendments to the Representation Act are therefore essential. Henceforth the Chief Australian Electoral Officer will determine the representation of the several States during each normal Parliamentary triennium. Should the representation for any State be varied consequent upon such determination, a redistribution will be required. Future determinations will be based on latest available statistics prepared by the Australian Statistician, rather than on census figures.

Since the general election of 1922 the Northern Territory has been represented by one member in the House of Representatives, and the Australian Capital Territory has had similar representation since the elections of 1949. The member for the Australian Capital Territory has had full voting rights since the first sitting of the twenty-sixth Parliament. In May 1968 the Northern Territory Representation Act was amended to give full voting rights to the Member for the Northern Territory effective from 15 May 1968, the day on which the Act received Royal Assent.

Following Parliament's approval of the Australian Capital Territory Representation (House of Representatives) Bill in October 1973, a Distribution Committee was appointed for the purpose of distributing the Australian Capital Territory into two electoral Divisions. On 19 March 1974 the Committee published an initial redistribution proposal.

By early April 1974 there was an indication that the House of Representatives would be dissolved before the Distribution Committee could complete its task, in which event the Australian Capital Territory would be deprived of any representation in the next Parliament. Accordingly the *Australian Capital Territory Representation* (*House of Representatives*) *Act* 1974 was enacted to provide that the Territory be divided into two electoral divisions, adopting the boundaries recommended by the Distribution Committee on 19 March 1974. The 1974 House of Representative elections were held on those boundaries.

Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators the whole State constitutes the electorate. For the purpose of elections for the House of Representatives the State is divided into single electorates corresponding in number to the number of members to which the State is entitled. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Year Book.

The *Commonwealth Electoral Act* 1948, enacted with the *Representation Act* 1948 which enlarged the Commonwealth Parliament (*see* page 86), changed the system of scrutiny and counting of votes in Senate elections from the alternative vote to that of proportional representation. For a description of the system, *see* Year Book No. 38, pages 82–3. The method of voting for both the Senate and the House of Representatives is preferential.

Particulars of voting at Senate elections and elections for the House of Representatives up to 1974 appear in earlier issues of the Year Book, and additional information is available in the *Statistical Returns* issued by the Chief Electoral Officer following each election and printed as Parliamentary Papers.

The numbers of electors and primary votes cast for the major political parties in each State and Territory at the latest election for each House of the Commonwealth Parliament were as follows.

COMMONWEALTH PARLIAMENT ELECTIONS, 13 DECEMBER 1975

HOUSE OF REPRESENTATIVES ELECTION

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Electors enrolled	2,961,698	2,234,778	1,206,231	789,004	658,419	255,402	40,885	115,916	8,262,333
Number of votes recorded for—									
Australian Labor Party	1,260,335	882,842	439,405	316,006	244,404	105,324	12,944	51,744	3,313,004
Liberal Party	1,100,672	887,635	370,041	365,353	326,679	131,003	..	50,727	3,232,160
National Country Party(*a*)	326,124	186,667	303,107	4,070	30,727	3,248	15,976	..	869,919
Liberal Movement	..	..	..	45,968	..	..	..	3,516	49,484
Democratic Labor Party	..	101,750	..	..	..	..	..	..	101,750
Australia Party	10,931	21,473	..	525	..	..	701	..	33,630
Workers Party	30,986	..	17,341	2,604	5,576	2,550	..	377	59,434
Others	43,072	17,280	3,700	6,642	1,664	..	..	840	73,198
Informal votes	52,760	42,008	14,604	18,201	14,334	4,569	996	1,822	149,294
Total votes recorded	**2,824,880**	**2,139,705**	**1,148,198**	**759,369**	**623,384**	**246,694**	**30,617**	**109,026**	**7,881,873**

SENATE ELECTION

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Electors enrolled	2,961,698	2,234,778	1,206,231	789,004	658,419	255,402	40,885	115,916	8,262,333
Number of votes recorded for—									
Australian Labor Party	1,123,462	811,773	387,740	277,800	203,151	78,310	10,207	33,867	2,931,310
Liberal Party; National Country Party(*a*)(*b*)	1,258,859	993,634	603,228	351,818	287,358	108,853	..	45,743	3,649,493
National Country Party(*a*)(*b*)	..	..	..	..	38,366	3,611	15,519	..	57,496
Liberal Movement	6,218	16,279	4,709	44,136	5,084	..	..	..	76,426
Democratic Labor Party	44,543	115,866	26,833	942	2,865	..	..	..	191,049
Australia Party	10,616	19,319	2,516	..	1,616	..	565	..	34,632
Workers Party	28,513	..	20,857	4,085	6,726	1,007	615	582	62,385
Others	77,537	9,206	7,326	5,048	10,946	30,538	1,521	19,800	161,922
Informal votes	275,132	173,628	94,989	75,540	67,272	24,375	2,190	4,034	717,160
Total votes recorded	**2,824,880**	**2,139,705**	**1,148,198**	**759,369**	**623,384**	**246,694**	**30,617**	**109,026**	**7,881,873**

(*a*) The National Country Party is known in the various States as follows: New South Wales—Australian Country Party; Victoria, Queensland and Tasmania—National Party; South Australia and Western Australia—National Country Party. In the Northern Territory it is known as the Country Liberal Party. (*b*) In New South Wales, Victoria and Queensland the Liberal Party and the National Country Party candidates stood as one group; in South Australia and the Australian Capital Territory only the Liberal Party stood as a group; in Western Australia and Tasmania the National Country Party and the National Party respectively, and the Liberal Party each stood as separate groups; in Northern Territory there was a Country Liberal Party group only.

The Senate and House of Representatives Election, 13 December 1975

Membership at 18 February 1976 was: *Senate*—Australian Labor Party, 27; Liberal Party of Australia, 27; National Country Party of Australia, 8; Independent, 1; Liberal Movement, 1; *House of Representatives*—Australian Labor Party, 36; Liberal Party of Australia, 68; National Country Party of Australia, 23.

Members of the Commonwealth Parliament

The following is a list of Senators and Members of the House of Representatives of the Commonwealth Parliament at 7 June 1976. Party affiliation is indicated by the use of the following abbreviations:

A.L.P.—Australian Labor Party

Ind.—Independent

L.M.—Liberal Movement

L.P.—Liberal Party of Australia

N.C.P.—National Country Party of Australia (*see* footnote (*a*) above)

MEMBERS OF THE COMMONWEALTH PARLIAMENT, 7 JUNE 1976(*a*)

THE SENATE

President:
SENATOR THE HON. C. L. LAUCKE

Chairman of Committees:
SENATOR THE HON. T. C. DRAKE-BROCKMAN, D.F.C.

Leader of the Government in the Senate:
SENATOR THE HON. R. G. WITHERS

Leader of the Opposition in the Senate:
SENATOR THE HON. K. S. WRIEDT

Senator	*State*	*Term(b) expires 30 June*
Archer, B. R. (L.P.)	Tas.	1978
Baume, P. E. (L.P.)	N.S.W.	1978
Bishop, Hon. R. (A.L.P.)	S.A.	1981
Bonner, N. T. (L.P.)	Qld	1981
Brown, W. W. C. (A.L.P.)	Vic.	1978
Button, J. N. (A.L.P.)	Vic.	1978
Cameron, D. N. (A.L.P.)	S.A.	1978
Carrick, Hon. J. L. (L.P.)	N.S.W.	1981
Cavanagh, Hon. J. L. (A.L.P.)	S.A.	1981
Chaney, F. M. (L.P.)	W.A.	1978
Coleman, Ruth N. (A.L.P.)	W.A.	1978
Collard, S. J. (N.C.P.)	Qld	1978
Colston, M. A. (A.L.P.)	Qld	1978
Cormack, Hon. Sir Magnus, K.B.E. (L.P.)	Vic.	1978
Cotton, Hon. R. C. (L.P.)	N.S.W.	1981
Davidson, G. S. (L.P.)	S.A.	1981
Devitt, D. M. (A.L.P.)	Tas.	1978
Drake-Brockman, Hon. T. C., D.F.C. (N.C.P.)	W.A.	1978
Durack, P. D. (L.P.)	W.A.	1981
Georges, G. (A.L.P.)	Qld	1978
Gietzelt, A. T. (A.L.P.)	N.S.W.	1978
Greenwood, Hon. I. J., Q.C. (L.P.)	Vic.	1981
Grimes, D. J. (A.L.P.)	Tas.	1978
Guilfoyle, Hon. Margaret G. C. (L.P.)	Vic.	1981
Hall, R. S. (L.M.)	S.A.	1978
Harradine, B. (Ind.)	Tas.	1981
Jessop, D. S. (L.P.)	S.A.	1981
Keeffe, J. B. (A.L.P.)	Qld	1981
Kilgariff, B. F. (N.C.P.)	N.T.	(*c*)
Knight, J. W. (L.P.)	A.C.T.	(*c*)

Senator	*State*	*Term(b) expires 30 June*
Lajovic, M. E. (L.P.)	N.S.W.	1978
Laucke, Hon. C. L. (L.P.)	S.A.	1981
McAuliffe, R. E. (A.L.P.)	Qld	1981
McClelland, Hon. D. (A.L.P.)	N.S.W.	1981
McClelland, Hon. J. R. (A.L.P.)	N.S.W.	1981
McIntosh, G. D. (A.L.P.)	W.A.	1981
McLaren, G. T. (A.L.P.)	S.A.	1978
Martin, Kathryn J. (L.P.)	Qld	1978
Maunsell, C. R. (N.C.P.)	Qld	1981
Melzer, Jean I. (A.L.P.)	Vic.	1981
Messner, A. J. (L.P.)	S.A.	1978
Missen, A. J. (L.P.)	Vic.	1978
Mulvihill, J. A. (A.L.P.)	N.S.W.	1978
O'Byrne, J. (A.L.P.)	Tas.	1981
Primmer, C. G. (A.L.P.)	Vic.	1981
Rae, P. E. (L.P.)	Tas.	1981
Robertson, E. A. (A.L.P.)	N.T.	(*c*)
Ryan, Susan M. (A.L.P.)	A.C.T.	(*c*)
Scott, D. B. (N.C.P.)	N.S.W.	1981
Sheil, G. (N.C.P.)	Qld	1981
Sibraa, K. W. (A.L.P.)	N.S.W.	1978
Sim, J. P. (L.P.)	W.A.	1981
Tehan, T. J. (N.C.P.)	Vic.	1978
Thomas, A. M. (L.P.)	W.A.	1978
Townley, M. (L.P.)	Tas.	1981
Walsh, P. A. (A.L.P.)	W.A.	1978
Walters, Mary S. (L.P.)	Tas.	1978
Webster, Hon. J. J. (N.C.P.)	Vic.	1981
Wheeldon, Hon. J. M. (A.L.P.)	W.A.	1981
Withers, Hon. R. G. (L.P.)	W.A.	1981
Wood, I. A. C. (L.P.)	Qld	1978
Wriedt, Hon. K. S. (A.L.P.)	Tas.	1981
Wright, Hon. R. C. (L.P.)	Tas.	1978
Young, H. W. (L.P.)	S.A.	1978

(*a*) For later changes *see* Appendix. (*b*) Senators are elected for a term of six years on a rotational basis; the terms of half the Senators expire every third year. (*c*) Pursuant to the *Senate (Representation of Territories Act)* 1973, the term of office expires at the close of the day next preceding the polling day for the general election of Members of the House of Representatives.

MEMBERS OF THE COMMONWEALTH PARLIAMENT
7 JUNE 1976(*a*)—*continued*

THE HOUSE OF REPRESENTATIVES
(Triennial Parliaments—Last General Election
13 December 1975)

Speaker:
THE RT HON. B. M. SNEDDEN, Q.C., M.P.

Chairman of Committees:
P. E. LUCOCK, C.B.E., M.P.

Leader of the House:
THE HON. I. McC. SINCLAIR, M.P.

Leader of the Opposition:
THE HON. E. G. WHITLAM, Q.C., M.P.

Member	*Division*
Abel, J. A. (L.P.)	Evans (N.S.W.)
Adermann, Hon. A. E. (N.C.P.)	Fisher (Qld)
Aldred, K. J. (L.P.)	Henty (Vic.)
Anthony, Rt Hon. J. D. (N.C.P.)	Richmond (N.S.W.)
Armitage, J. L. (A.L.P.)	Chifley (N.S.W.)
Baillieu, M. (L.P.)	La Trobe (Vic.)
Baume, M. E. (L.P.)	Macarthur (N.S.W.)
Beazley, Hon. K. E. (A.L.P.)	Fremantle (W.A.)
Birney, R. J. (L.P.)	Phillip (N.S.W.)
Bonnett, R. N. (L.P.)	Herbert (Qld)
Bourchier, J. W. (L.P.)	Bendigo (Vic.)
Bowen, Hon. L. F. (A.L.P.)	Kingsford-Smith (N.S.W.)
Bradfield, J. M. (L.P.)	Barton (N.S.W.)
Braithwaite, R. A. (N.C.P.)	Dawson (Qld)
Brown, N. A. (L.P.)	Diamond Valley (Vic.)
Bryant, Hon. G. M., E.D. (A.L.P.)	Wills (Vic.)
Bungey, M. H. (L.P.)	Canning (W.A.)
Burr, M. A. (L.P.)	Wilmot (Tas.)
Cadman, A. G. (L.P.)	Mitchell (N.S.W.)
Cairns, Hon. J. F. (A.L.P.)	Lalor (Vic.)
Cairns, Hon. K. M. (L.P.)	Lilley (Qld)
Calder, S. E., D.F.C. (N.C.P.)	Northern Territory
Cameron, Hon. C. R. (A.L.P.)	Hindmarsh (S.A.)
Cameron, D. M. (L.P.)	Griffith (Qld)
Carige, C. L. (N.C.P.)	Capricornia (Qld)
Cass, Hon. M. H. (A.L.P.)	Maribyrnong (Vic.)
Chapman, H. G. P. (L.P.)	Kingston (S.A.)
Chipp, Hon. D. L. (L.P.)	Hotham (Vic.)
Cohen, B. (A.L.P.)	Robertson (N.S.W.)
Connolly, D. M. (L.P.)	Bradfield (N.S.W.)
Connor, Hon. R. F. X. (A.L.P.)	Cunningham (N.S.W.)
Corbett, J. (N.C.P.)	Maranoa (Qld)
Cotter, J. F. (L.P.)	Kalgoorlie (W.A.)
Crean, Hon. F. (A.L.P.)	Melbourne Ports (Vic.)
Dobie, Hon. J. D. M. (L.P.)	Cook (N.S.W.)
Drummond, P. H. (L.P.)	Forrest (W.A.)
Edwards, H. R. (L.P.)	Berowra (N.S.W.)
Ellicott, Hon. R. J. Q.C. (L.P.)	Wentworth (N.S.W.)
Falconer, P. D. (L.P.)	Casey (Vic.)
Fife, Hon. W. C. (L.P.)	Farrer (N.S.W.)
Fisher, P. S. (N.C.P.)	Mallee (Vic.)
FitzPatrick, J. (A.L.P.)	Darling (N.S.W.)
Fraser, Rt Hon. J. M. (L.P.)	Wannon (Vic.)
Fry, K. L. (A.L.P.)	Fraser (A.C.T.)
Garland, Hon. R. V. (L.P.)	Curtin (W.A.)
Garrick, H. J. (A.L.P.)	Batman (Vic.)
Giles, G. O'H. (L.P.)	Angas (S.A.)
Gillard, R. (L.P.)	Macquarie (N.S.W.)
Goodluck, B. J. (L.P.)	Franklin (Tas.)
Graham, B. W. (L.P.)	North Sydney (N.S.W.)
Groom, R. J. (L.P.)	Braddon (Tas.)
Hamer, D. J. D.S.C. (L.P.)	Isaacs (Vic.)
Haslem, J. W. (L.P.)	Canberra (A.C.T.)
Hayden, Hon. W. G. (A.L.P.)	Oxley (Qld)
Hodges, J. C. (L.P.)	Petrie (Qld)
Hodgman, M. (L.P.)	Denison (Tas.)
Holten, Hon. R. McN. (N.C.P.)	Indi (Vic.)
Howard, Hon. J. W. (L.P.)	Bennelong (N.S.W.)

(*a*) For later changes *see* Appendix.

MEMBERS OF THE COMMONWEALTH PARLIAMENT 7 JUNE 1976(*a*)—*continued*

THE HOUSE OF REPRESENTATIVES—*continued*

Member	*Division*
Hunt, Hon. R. J. D. (N.C.P.)	Gwydir (N.S.W.)
Hurford, C. J. (A.L.P.)	Adelaide (S.A.)
Hyde, J. M. (L.P.)	Moore (W.A.)
Innes, U. E. (A.L.P.)	Melbourne (Vic.)
Jacobi, R. (A.L.P.)	Hawker (S.A.)
James, A. W. (A.L.P.)	Hunter (N.S.W.)
Jarman, A. W. (L.P.)	Deakin (Vic.)
Jenkins, H. A. (A.L.P.)	Scullin (Vic.)
Johnson, L. K. (A.L.P.)	Burke (Vic.)
Johnson, Hon. L. R. (A.L.P.)	Hughes (N.S.W.)
Johnson, P. F. (L.P.)	Brisbane (Qld)
Jones, Hon. C. K. (A.L.P.)	Newcastle (N.S.W.)
Jull, D. F. (L.P.)	Bowman (Qld)
Katter, Hon. R. C. (N.C.P.)	Kennedy (Qld)
Keating, Hon. P. J. (A.L.P.)	Blaxland (N.S.W.)
Kelly, Hon. C. R. (L.P.)	Wakefield (S.A.)
Killen, Hon. D. J. (L.P.)	Moreton (Qld)
King, Hon. R. S. (N.C.P.)	Wimmera (Vic.)
Klugman, R. E. (A.L.P.)	Prospect (N.S.W.)
Lloyd, B. (N.C.P.)	Murray (Vic.)
Lucock, P. E., C.B.E. (N.C.P.)	Lyne (N.S.W.)
Lusher, S. A. (N.C.P.)	Hume (N.S.W.)
Lynch, Hon. P. R. (L.P.)	Flinders (Vic.)
MacKellar, Hon. M. J. R. (L.P.)	Warringah (N.S.W.)
Mackenzie, A. J. (N.C.P.)	Calare (N.S.W.)
McLean, R. M. (L.P.)	Perth (W.A.)
McLeay, Hon. J. E. (L.P.)	Boothby (S.A.)
McMahon, J. L. (A.L.P.)	Sydney, (N.S.W.)
McMahon, Rt Hon. W., C.H. (L.P.)	Lowe (N.S.W.)
Macphee, I. M. (L.P.)	Balaclava (Vic.)
McVeigh, D. T. (N.C.P.)	Darling Downs (Qld)
Martin, V. J. (A.L.P.)	Banks (N.S.W.)
Martyr, J. R. (L.P.)	Swan (W.A.)
Millar, P. C. (N.C.P.)	Wide Bay (Qld)
Moore, J. C. (L.P.)	Ryan (Qld)
Morris, P. F. (A.L.P.)	Shortland (N.S.W.)
Neil, M. J. (L.P.)	St George (N.S.W.)
Newman, Hon. K. E. (L.P.)	Bass (Tas.)
Nicholls, M. H. (A.L.P.)	Bonython (S.A.)
Nixon, Hon. P. J. (N.C.P.)	Gippsland (Vic.)
O'Keefe, F. L. (N.C.P.)	Paterson (N.S.W.)
Peacock, Hon. A. S. (L.P.)	Kooyong (Vic.)
Porter, J. R. (L.P.)	Barker (S.A.)
Richardson, P. A. (L.P.)	Tangney (W.A.)
Robinson, Hon. E. L. (L.P.)	McPherson (Qld)
Robinson, Hon. I. L. (N.C.P.)	Cowper (N.S.W.)
Ruddock, P. M. (L.P.)	Parramatta (N.S.W.)
Sainsbury, M. E. (L.P.)	Eden-Monaro (N.S.W.)
Scholes, G. G. D. (A.L.P.)	Corio (Vic.)
Shipton, R. F. (L.P.)	Higgins (Vic.)
Short, J. R. (L.P.)	Ballaarat (Vic.)
Simon, B. D. (L.P.)	McMillan (Vic.)
Sinclair, Hon. I. McC. (N.C.P.)	New England (N.S.W.)
Snedden, Rt Hon. B. M. Q.C. (L.P.)	Bruce (Vic.)
Staley, Hon. A. A. (L.P.)	Chisholm (Vic.)
Stewart, Hon. F. E. (A.L.P.)	Lang (N.S.W.)
Street, Hon. A. A. (L.P.)	Corangamite (Vic.)
Sullivan, J. W. (N.C.P.)	Riverina (N.S.W.)
Thomson, D. S., M.C. (N.C.P.)	Leichhardt (Qld)
Uren, Hon. T. (A.L.P.)	Reid (N.S.W.)
Viner, Hon. R. I. (L.P.)	Stirling (W.A.)
Wallis, L. G. (A.L.P.)	Grey (S.A.)
Wentworth, Hon. W. C. (L.P.)	Mackellar (N.S.W.)
Whitlam, A. P. (A.L.P.)	Grayndler (N.S.W.)
Whitlam, Hon. E. G., Q.C. (A.L.P.)	Werriwa (N.S.W.)
Willis, R. (A.L.P.)	Gellibrand (Vic.)
Wilson, I. B. C. (L.P.)	Sturt (S.A.)
Yates, W. (L.P.)	Holt (Vic.)
Young, M. J. (A.L.P.)	Port Adelaide (S.A).

(*a*) For later changes *see* Appendix.

Referendums

In accordance with section 128 of the Constitution any proposed law for the alteration of the Constitution, in addition to being passed by an absolute majority of each House of Parliament, must be submitted to a referendum of the electors in each State, and must be approved by a majority of the electors in a majority of the States and also by a majority of all the electors who voted, before it can be presented for Royal Assent. Thirty-two such proposals have so far been submitted to referendums and the consent of the electors has been received in five cases the first in relation to the election of Senators in 1906, the second and third in respect of State Debts—one in 1910 and the other in 1928, the fourth in respect of Social Services in 1946, and the fifth in respect of Aboriginals in 1967. In addition to referendums for alterations of the Constitution, other Commonwealth referendums have been held—two prior to Federation regarding the proposed Constitution and two regarding military service during the 1914–1918 War. For details of earlier referendums *see* Year Book No. 52, pages 66–8.

On 17 and 26 September 1973 respectively, two Bills were introduced in the House of Representatives to alter the Constitution; one Bill being designed to grant the Australian Government control over prices, the other to grant similar control over incomes. The proposed laws, after being passed by both Houses of Parliament, were submitted to the electors of the States at referendums held on 8 December 1973. At these referendums the electors voted in all States to reject both proposed laws. For a summary of the results of the voting *see* Year Book No. 60, page 90.

In November 1973 four Bills were introduced in and passed by the House of Representatives to alter the Constitution. The Constitution Alteration (Simultaneous Elections) Bill was designed to ensure that future Senate elections would be held simultaneously with the House of Representatives elections. The Constitution Alteration (Mode of Altering the Constitution) Bill was designed to facilitate alterations to the Constitution and to allow electors in the Territories, as well as electors in the States, to vote on proposed laws to alter the Constitution. The Constitution Alterations (Democratic Elections) Bill was designed to ensure that members of the House of Representatives and of the State Parliaments would be 'chosen directly and democratically by the People'. The Constitution Alteration (Local Government Bodies) Bill was designed to enable the Commonwealth Government to borrow money for, and to grant financial assistance to, local government bodies.

On 4 December 1973 the Senate referred the first of these proposed laws to its Standing Committee on Constitutional and Legal Affairs; amended the second; and rejected the third and fourth. On 6 March 1974, the four proposed laws were passed a second time by the House of Representatives. On 13 March 1974 the Senate rejected the Constitution Alteration (Simultaneous Elections) and Constitution Alteration (Local Government Bodies) Bills; and, on 14 March 1974, rejected the Constitution Alteration (Democratic Elections) Bill and amended the Constitution Alteration (Mode of Altering the Constitution) Bill. On 21 March 1974 the Prime Minister announced that, acting under section 128 of the Constitution, the Governor-General had accepted the Government's advice to submit these four proposed laws to the electors of the States at referendums to be held on 18 May 1974, simultaneously with the general election. At these referendums electors in all States except New South Wales voted to reject the four proposed laws; electors in New South Wales voted in favour of all four proposed laws. Particulars of the voting at these referendums are shown in Year Book No. 60, page 91.

The Parliaments of the States

This chapter contains summarised information on the Parliaments of each State, the numbers of Houses and members, and salaries payable. For greater detail reference should be made to individual State Year Books.

Membership of State Parliaments. The following table shows the party distribution in each of the various State Parliaments at June 1976.

STATE PARLIAMENTS: MEMBERSHIP, BY PARTY AFFILIATION, JUNE 1976

Party	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
UPPER HOUSE						
Australian Country Party (C.P.)	13	..	..	..	..	..
Australian Labor Party (A.L.P.)	24	9	..	10	9	2
Independent (Ind.)	1	..	..	..	..	17
Liberal Party of Australia (L.P.)	22	26	..	11	18	..
National Country Party (N.C.P.)(*a*)	..	..	..	..	3	..
National Party of Australia (Victoria) (N.P.A.)	..	5	..	..	..	..
Total	**60**	**40**	(*b*)	**21**	**30**	**19**
LOWER HOUSE						
Australian Country Party (C.P.)	18	..	..	1	..	..
Australian Labor Party (A.L.P.)	50	21	11	23	22	21
Independent (Ind.)	1	..	1	1	..	..
Independent Labor (Ind. Lab.)	..	1	..	..	..	..
Liberal Party of Australia (L.P.)	29	52	30	21	23	14
National Country Party (N.C.P.)(*a*)	..	..	..	..	6	..
National Party (N.P.)	..	..	39	..	..	..
National Party of Australia (Victoria) (N.P.A.)	..	7	..	..	..	..
New Liberal Movement (N.L.M.)	..	..	..	1	..	..
North Queensland Party (N.Q.P.)	..	..	1	..	..	..
Vacancy	1	..	..	..	..	..
Total	**99**	**81**	**82**	**47**	**51**	**35**

(*a*) Formerly the National Alliance Party. (*b*) Upper House abolished in 1922.

For corresponding particulars for the Commonwealth Parliament, *see* page 88.

Number and salaries and allowances of members of the legislatures, Commonwealth parliaments, June 1976

COMMONWEALTH PARLIAMENTS: MEMBERS AND ANNUAL SALARIES AND ALLOWANCES, JUNE 1976

Members in—	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
NUMBER OF MEMBERS								
Upper House	64	60	40	(*a*)	21	30	19	234
Lower House	127	99	81	82	47	51	35	522
Total	**191**	**159**	**121**	**82**	**68**	**81**	**54**	**756**
ANNUAL SALARY ($)								
Upper House	20,000	9,000	19,500	(*a*)	16,500	18,005	16,582	
Lower House	20,000	19,660	19,500	18,980	16,500	18,005	16,582	
ELECTORAL ALLOWANCES ($)								
Upper House	(*b*)4,100	(*c*)3,280	(*d*)4,180–5,990	(*a*)	4,000	(*d*)4,800–9,000	(*d*)1,824–4,311	
Lower House	(*b*)4,100	(*d*)4,750–7,100	(*d*)4,180–5,990	(*d*)3,140–7,670	(*d*)2,500–5,100	(*d*)4,200–8,400	(*d*)2,487–5,804	

(*a*) Abolished in 1922. (*b*) Certain additional allowances are also provided for holders of parliamentary offices etc. (*c*) Referred to as an expense allowance. An additional $39 per sitting day is payable to members who live outside the metropolitan area. (*d*) Allowance payable depends on location of electorate and, for Victoria and Tasmania, size of electorate. A special expense allowance for members in N.S.W., ranging from $2,275 to $2,840, is paid to members representing country electorates.

Outlay on parliamentary government

The table below shows, in broad groups, the expenditure incurred in the operation of the parliamentary system in Australia, comprising the Governor-General and Governors, the Ministries, the Upper and Lower Houses of Parliament, and electoral activities; *it does not attempt to cover the expenditure on Commonwealth and State administration generally.* Only broad groups are shown, but even these are not entirely comparable because of differences in accounting procedures and in the presentation of accounts. Expenditure under the head of Governor-General or Governor includes salaries of Government House staffs and maintenance of residences, official establishments, grounds, etc., and expenditure on capital works and services.

OUTLAY ON PARLIAMENTARY GOVERNMENT, 1974-75

($'000)

Expenditure group	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Governor-General or Governor(*a*)	952	343	591	477	352	304	348	3,368
Ministry(*b*)	1,972	734	709	475	304	339	416	4,950
Parliament—								
Upper House(*c*)	1,581	639	798	..	310	555	310	4,193
Lower House(*c*)	3,197	1,927	1,622	1,770	719	927	483	10,645
Both Houses(*d*)	13,112	3,555	2,323	2,165	1,797	2,007	641	25,599
Miscellaneous(*e*)	8,190	689	739	431	206	241	79	10,576
Total, Parliament	*26,081*	*6,809*	*5,482*	*4,367*	*3,033*	*3,729*	*1,512*	*51,013*
Electoral(*f*)	8,978	144	269	1,012	156	301	159	11,019
Royal Commissions, Select Committees, etc.	2,961	..	143	1	51	191	25	3,372
Grand Total	**40,944**	**8,031**	**7,194**	**6,332**	**3,895**	**4,865**	**2,461**	**73,722**

(*a*) Salaries and other expenses, including maintenance of house and grounds. (*b*) Salaries, travelling and other expenses as ministers. (*c*) Allowances to members (including ministers' salaries as members), travelling and other expenses. (*d*) Government contribution to members' superannuation funds, printing, reporting staff, library, etc. (*e*) Services, furniture, stores, etc. (*f*) Salaries, cost of elections, etc.

OUTLAY ON PARLIAMENTARY GOVERNMENT

Year	*Cwlth*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
TOTAL ($'000)								
1970-71	18,064	4,299	3,883	2,082	2,356	2,305	1,249	34,239
1971–72	18,432	4,520	3,475	2,717	2,436	2,486	1,327	35,393
1972–73	23,515	5,310	4,490	3,182	2,677	2,516	1,316	43,006
1973–74	36,990	7,378	5,218	4,340	3,190	4,213	1,935	63,263
1974–75	40,944	8,031	7,194	6,332	3,895	4,865	2,461	73,722
PER HEAD OF POPULATION ($)								
1970–71	1.43	0.94	1.12	1.15	2.02	2.27	3.21	2.71
1971–72	1.43	0.97	0.98	1.47	2.06	2.38	3.38	2.74
1972–73	1.80	1.13	1.25	1.68	2.24	2.36	3.33	3.11
1973–74	2.79	1.56	1.44	2.23	2.64	3.88	4.85	4.77
1974–75	3.04	1.69	1.96	3.19	3.17	4.37	6.09	5.47

Commonwealth Government Departments

For current detailed information on the Acts administered, the functions and the organisation of the Departments and Agencies of the Commonwealth Government *see* the *Commonwealth Government Directory* (latest issue 1977).

Enactments of the Parliaments

In the Commonwealth Parliament all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution. In the States other than South Australia and Tasmania, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania laws are enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. Generally, assent to Bills passed by the legislatures is given by the Governor-General or State Governor acting on behalf of, and in the name of, the Sovereign. In certain special cases Bills are reserved for the Royal assent. The Parliaments of the States are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States in all cases whatsoever. Subject to certain limitations they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth Parliament the latter prevails, and the former is to the extent of the inconsistency invalid.

The course of Commonwealth Parliament legislation

The actual legislation by the Commonwealth Parliament during 1975 is indicated in alphabetical order in *The Acts of the Parliament of the Commonwealth of Australia passed during the year 1975 in the Second Session of the Twenty-ninth Parliament of the Commonwealth, with Appendix, Tables and Index*. A chronological table of Acts passed from 1901 to 1973 showing how they are affected by subsequent legislation or lapse of time is also available; this volume also contains a table of legislation of the Commonwealth Parliament passed from 1901 to 1973 in relation to the several provisions of the Constitution. Reference should be made to these for complete information.

The following figures indicate the variation over the years in the number of enactments of the Commonwealth Parliament since 1901. Seventeen Acts were passed in 1901, 36 in 1914, 38 in 1927, 87 in 1939, 109 in 1952, 156 in 1965, 157 in 1968, 223 in 1973, 166 in 1974 and 121 in 1975.

CHAPTER 4

DEFENCE

DEPARTMENT OF DEFENCE

Central organisation for Defence

Recommendations for an integrated and functional organisation for the Department of Defence were accepted by the Government in December 1974 (*see* Year Book No. 60, 1974) and legislation to give effect to the re-organisation of the higher management of the Defence Force and the Department of Defence was passed by the Commonwealth Parliament in September 1975. The legislation, which came into effect on 9 February 1976, specifically recognises that responsibility for the general control and administration of the Defence Force rests with the Minister for Defence.

A new statutory appointment, the Chief of Defence Force Staff, was created to exercise command of the Defence Force through the three Service Chiefs of Staff (Navy, Army and Air) who are the professional heads and have responsibility for the management of their respective arms of the Defence Force. The Chief of Defence Force Staff is the principal military adviser to the Minister and together with the Secretary, Department of Defence advises the Minister on matters involving their joint responsibility.

The three Service Boards (Navy, Army and Air) have been dissolved and most of their power retained by the Minister or delegated by him to specific or appropriate military and civilian appointments under the Chief of Defence Force Staff and Secretary, Department of Defence respectively, within the unified Department. Under the reorganisation the three Service Chiefs of Staff, the Chief of Defence Force Staff and the Secretary, Department of Defence all have the right of access to the Minister.

The Secretary, Department of Defence has the powers and functions generally prescribed for such appointments in the Australian Public Service Act, but now qualified by the statutory authority of the Chief of Defence Force Staff and by Ministerial directives to the Secretary, enjoining responsiveness of the Public Service structure to the operational priorities of the Chiefs of Staff. The Secretary is responsible to the Minister for advice on general policy and on the management and utilisation of defence resources.

Role and functions of the Department of Defence

The role of the Department of Defence basically is the development of policy and advice to the Minister for Defence, and the co-ordination and execution of approved policy and the direction of the Defence Force.

The functions of the Department include strategic appreciations, national intelligence assessments and strategic intelligence reports; defence planning, systems analysis and formulating policy on force structure and force deployment; administrative policy and military advice for the Minister for Defence, organisation of collective military advice; planning and control of military operations; defence programming, resources allocation and expenditure control; scientific advice and formulation of defence research and development policy; policy relating to defence industry, facilities and procurement; rationalisation of Service activities and co-ordination of their policies; pay, allowances and conditions of service in the Defence Force and during retirement; establishments, postings and promotions; legislation concerning the Armed Services; public relations; Defence representatives overseas; defence electronic data processing; civil defence and administration of the Natural Disasters Organisation.

Higher defence machinery

Council of Defence

A Council of Defence has been established as provided for in the Defence Act. Its function is to consider and discuss matters referred to it by the Minister relating to the control and administration of the Defence Force and the respective Arms of the Defence Force. The Council is chaired by the Minister for Defence and membership includes the Minister assisting the Minister for Defence, the Chiefs of Staff and the Secretary of the Department of Defence.

The Committee structure

The Committee structure within the Department of Defence provides for reconciliation of the respective Services' operational requirements, professional management of the military career and sound management of resources and general policy. The committees accommodate the expertise of both military and civilian members and the material interests of the three Arms of the Defence Force. The following are the principal committees and their functions.

The *Defence Committee* advises the Minister for Defence on those general defence policies whose formulation calls for presentation of co-ordinated information and advice about the strategic, military, foreign affairs and economic aspects of defence.

The *Defence Force Development Committee* reviews the Five Year Defence Program and the annual Defence Estimates, as prepared by the staff, and conveys collective or individual comments to the Minister. The Committee exchanges views and reviews progress in the development of the Defence Program; provides the Minister and Defence Department staff with collective or individual opinion on the major weapon systems proposed in the Five Year Defence Program; and provides a forum for discussions of defence policy implications of military operations.

The *Chiefs of Staff Committee* is responsible to the Minister for Defence, through the Chief of Defence Force Staff for providing collective professional advice on military operations and on the military implications of defence policy and activities. It endorses military plans; provides collective advice concerning, and control and administration of, special forces of a multi-national nature, the responsibility for which is assigned to the Commonwealth Government, subject to such control conforming to the principles and procedures of the established machinery of Government and administration. It recommends the allocation of resources to designated commanders engaged in joint operations, and endorses the military aspects of policies concerning joint service units and installations.

The *Defence (Administration) Committee* reviews the Defence program and controls the Defence vote.

The *Defence Science Board* considers in the context of Defence objectives major issues concerning the policy for defence science including its relationship to other national interests.

The *Defence (Industrial) Committee* considers matters concerning the capacity of Australian industry to contribute to the defence requirements of the country; makes recommendations when appropriate for the retention of existing capacity or the development of new capacity in the light of Department of Defence assessments of requirements; provides guidelines to allow industry to prepare for meeting the requirements of the Defence Force during periods of threat or of war at varying levels of intensity and duration; gives financial and management advice to the Department of Defence and the Services on questions referred to it; advises on stockholding of strategic materials; considers questions relating to the Defence Cataloguing System, and equipment standardisation; oversights the Industrial Mobilisation Course; and reports annually to the Minister for Defence on its activities.

The *Defence (Conditions of Service) Committee* considers major issues concerning rates of pay and financial conditions of service of personnel of the Defence Force as a basis for recommendations to the Minister for Defence.

The *Joint Planning Committee* advises the Defence Committee and/or the Chief of Defence Force Staff and/or Chiefs of Staff Committee on operational aspects of defence planning; appreciations and plans for combined operations; and co-ordination of joint training.

Basis of current defence policy

The primary aim of Australian defence policy is to ensure the security of Australia and its Territories.

Defence policy is to maintain a substantial level of defence forces, to promote self reliance and to maintain relations in the defence field with allies and regional associates. Australia participates in the ANZUS alliance, and the Five Power arrangements.

In a period assessed as having low-threat probability, the basic concept for the force structure is a core force of sufficient skills and capabilities in existence, to allow timely expansion should there be unfavourable developments in the strategic situation.

Defence expenditure

DEFENCE EXPENDITURE BY DEPARTMENTS
($'000)

	Defence					*Industry and Commerce (a)*	*Other(a)*	*Total*
	Central(a)(b)	*Navy*	*Army*	*Air*	*Total*			
Actual expenditure—								
1970–71	88,822	247,924	421,037	302,657	1,060,440	58,446	13,756	1,132,642
1971–72	98,039	270,243	465,792	303,239	1,137,313	63,431	4,805	1,205,549
1972–73	110,278	293,094	445,061	352,185	1,200,618	69,952	3,304	1,273,874
1973–74	159,887	329,011	472,669	358,274	1,319,841	79,596	7,596	1,407,033
1974–75	311,883	404,410	550,299	409,357	1,675,949	109,492	5,207	1,790,648
1975–76	298,265	439,483	609,636	505,173	1,852,557	72,292	18,408	1,943,257
Estimated expenditure—								
1976–77	350,745	539,808	686,478	577,951	2,154,982	76,933	23,627	2,255,542

(*a*) Figures have been compiled on the basis of Departments as they are now organised (*see* page 109). (*b*) Includes Defence Forces Retirement and Death Benefits and Defence Science and Technology.

Equipment

An amount of $102.3 million was spent on equipment of a capital nature in 1974–75. An amount of $181.6 million is expected to be spent in 1975–76.

The major equipment items received by the Services in 1974–75 included 8 Sea King ASW helicopters, 1 slave dock for submarine refits, 10 light observation helicopters, 3 prototype fire support vehicles, 10 basic trainer aircraft (CT4) and 4 surveillance radars.

Major new equipment items planned for delivery in 1975–76 include 27 basic trainers (CT4), 1 Nomad aircraft, 18 light observation helicopters, 11 Turana pilotless target aircraft, 2 Sea King ASW helicopters, 1 surveillance radar and 4 medium girder bridges.

Defence Force manpower

Strength at June	*Permanent forces*	*Reserves(a)*	*Total*
NAVY			
1966	14,633	2,131	16,764
1967	15,764	2,365	18,129
1968	16,294	2,480	18,774
1969	16,758	2,661	19,419
1970	17,089	2,383	19,472
1971	16,997	2,303	19,300
1972	16,890	2,120	19,010
1973	17,215	1,935	19,150
1974	16,141	1,593	17,734
1975	16,094	1,302	17,396
1976 (estimated)	16,115	1,030	17,145
ARMY			
	(*b*)		
1966	32,702	33,526	66,228
1967	41,392	36,322	77,714
1968	42,840	37,523	80,363
1969	43,915	35,884	79,799
1970	44,513	33,316	77,829
1971	43,769	30,943	74,712
1972	41,273	28,009	69,282
1973	33,990	23,119	57,109
1974	30,235	20,000	50,235
1975	31,514	20,374	51,888
1976 (estimated)	31,500	21,150	52,650
AIR			
1966	19,358	1,035	20,393
1967	20,130	1,362	21,492
1968	21,564	1,304	22,868
1969	22,712	1,369	24,081
1970	22,642	1,509	24,151
1971	22,539	1,488	24,027
1972	22,720	1,399	24,119
1973	22,717	1,191	23,908
1974	21,119	748	21,867
1975	21,546	554	22,100
1976 (estimated)	21,300	490	21,790

(*a*) Refers to Reserves with training obligations. Figures exclude those members who are serving full time in the Permanent Defence Force. (*b*) Figures include National Servicemen in the period 1966–72 when there was compulsory military service for those selected.

Reserve Forces

The Reserve Forces of the Navy, Army and Air Force are available to supplement the Permanent Defence Force.

Each Reserve Force consists of several reserve elements with different call out provisions and training obligations. The most important elements involve a training obligation and are as follows.

Emergency Reserves (Naval Emergency Reserve Forces, Regular Army Emergency Reserve, Air Force Emergency Reserve) which may be called out by the Governor-General for continuous full-time service as the need arises.

Citizen Forces (Royal Australian Naval Reserve, Active Citizen Military Forces, Active Citizen Air Force) which may be called out by proclamation for continuous full-time service in a time of defence emergency or war.

Defence science and technology

The activities of the new Defence Science and Technology Organisation (D.S.T.O.) which were previously conducted in agencies administered by the Service Departments and the former Department of Manufacturing Industry are now conducted within the Department of Defence. From 1 July 1974, by agreement between the Minister for Defence and the Minister for Manufacturing Industry, the Department of Defence exercised management and technical control of Research and Development (R & D) agencies of the former Department of Manufacturing Industry. On 1 July 1975 these agencies came fully under policy, administrative and technical control of the Chief Defence Scientist.

The functions of the D.S.T.O. are: defence science policy; scientific advice on all defence matters; analysis of weapons systems and equipment; relationship of Australian R & D to international programs; conduct of R & D; trials and evaluation of proposed and existing equipment.

The D.S.T.O. consists of the following three main functional areas of responsibility: Military Studies and Operational Analysis Division; Policy and Program Planning Division; Australian Defence Scientific Service.

Military Studies and Operational Analysis Division

The Division formulates the program of analytical studies for tactical, operational and force structure problems throughout the D.S.T.O.

Policy and Program Planning Division

This Division defines principal objectives of the D.S.T.O. and advises on scientific and technical aspects of Defence policy including arrangements for international co-operation in scientific and technical activities.

Australian Defence Scientific Service

The Service prepares, co-ordinates and reviews the D.S.T.O. program. It provides overall management of the scientific and financial resources of the Defence laboratories and trials units. Proposals to the Chief Defence Scientist for the choice, development and use of weapons and equipment by the Australian Defence Force are initiated and assessed. Under co-operative arrangements with governments outside Australia, it provides the scientific, technological and administrative effort required for the development and operation of facilities specified in the arrangements and, by agreement, plans, conducts and analyses these operations.

Within the Australian Defence Scientific Service, the *Services Laboratories and Trials Division* is responsible for the planning and execution of trials of service equipment. It maintains a source of engineering design, development and modification for Defence Force equipment and a source of technical advice associated with the planning, engineering and evaluation of new equipment and with the management of in-service equipment. Advice is provided to the Defence Force and the Department on the general engineering and trials standards appropriate to Service equipment.

Major establishments and laboratories operating under the control of the Services Laboratories and Trials Division include:

The *Engineering Development Establishment* in Victoria which provides for the Defence Force and the Department a source of development engineering; equipment design and related advice.

The *Royal Australian Navy Research Laboratory* in New South Wales which undertakes research into underwater acoustics, oceanography, mine warfare and mine countermeasures.

The *Armed Forces Food Science Establishment* in Tasmania which is responsible for the preparation of special food specifications with particular emphasis on calorific content and storage life.

The *Royal Australian Navy Trials and Assessing Unit* in New South Wales which conducts ship and equipment tests and trials, investigations, inspections and evaluations and carries out assessments of weapon practices as required.

The *Tropical Trials Establishment* in Queensland which provides trials facilities and technical and administrative support for user, engineering and evaluation trials of stores and explosive material in a tropical environment.

The *Joint Tropical Research Unit* in Queensland, which is jointly sponsored by the United Kingdom and Australia, participates in a program of work involving the study of the behaviour and degradation of materials in tropical environments.

Other important establishments or laboratories under the control of the Australian Defence Scientific Service include:

The *Weapons Research Establishment* in South Australia which conducts research and development in areas of significance to Defence, including work on Australian-initiated defence projects.

It constructs, operates and develops the Woomera Range including the instrumentation and engineering facilities necessary to the Joint British/Australian Guided Weapons program. Weapons Research Establishment has four wings, namely the Applied Physics Wing, the Engineering Wing, the Weapons Research and Development Wing, and the Trials Wing.

The *Materials Research Laboratories* in Victoria, South Australia and New South Wales which provide R & D support to all branches of the Defence Force by establishing and maintaining scientific and technical expertise in particular fields relevant to the supply and operation of defence material including materials aspects of armaments and defence equipment, explosives and ammunition, instrumentation and standards of measurement and protection of personnel and equipment. It applies this expertise to the solution of Service and supply problems ranging from scientific investigation of current difficulties to development of new equipment. Scientific developments in the fields of physics, chemistry and metallurgy are studied which are judged to have potential defence application in the future.

The *Aeronautical Research Laboratories* (A.R.L.) in Victoria which undertake research and development in areas of significance to defence and on specific defence projects particularly in the field of aeronautics. It acts as consultant and makes investigations for the Defence Force, Government departments and authorities and industries engaged on defence work. Civil work may be undertaken where the special equipment or expertise at A.R.L. is required.

Defence representation overseas

Defence Attache representation is maintained in Afghanistan, Britain, Burma, Canada, France, India, Indonesia, Iran, Japan, Korea, Malaysia, Nepal, New Zealand, Pakistan, Papua New Guinea, the Philippines, Singapore, Thailand and the United States of America.

Defence co-operation with South-East Asian and South Pacific countries

In support of Australia's Defence policy, the Government conducts defence co-operation activities with countries in the region—particularly South-East Asian and South Pacific countries. These activities include joint projects, training in Australia, loan of personnel and combined military exercises.

In 1975–76, which was the first year Australian activities in Papua New Guinea were separately identified in the Australian Defence appropriation, assistance to P.N.G. was valued at $29.8 million. This included the loan of Australian servicemen to P.N.G., training for P.N.G. servicemen in Australia, survey and engineering projects in P.N.G. and the provision of certain items of equipment.

Expenditure on the Defence Co-operation Program with Indonesia to June 1976 amounted to $19.7 million. Major current projects include the survey and mapping of Irian Jaya, a field communications project, assistance with Sabre aircraft previously transferred to Indonesia by Australia, research and development projects, and a maritime patrol project.

Annual expenditure on Defence co-operation with Malaysia and Singapore is now running at approximately $4 million and $0.8 million respectively. Major continuing projects in Malaysia include an Armed Forces manufacturing workshop, a parachute and diving school, and electronic target ranges. Assistance to Singapore is mainly in the area of personnel training particularly qualified flying instructors.

Training assistance is provided to Thailand and the Philippines. Assistance to South Pacific countries is mainly in the form of training in Australia. Limited numbers of personnel are provided on loan.

Training in Service training establishments in Australia is an important part of defence co-operation activities. Over 600 overseas personnel are trained in Australia each year by the three Services.

THE DEFENCE FORCE

Defence Force activities overseas

The main areas in which Australian Defence Force elements have been deployed overseas during the year are Malaysia/Singapore and Papua New Guinea. Units have also visited Indonesia, New Zealand, Hawaii, Britain and Canada for exercises and training.

In support of the Five Power arrangements Australian Defence Force elements in the Malaysia/Singapore area include:

Navy—One destroyer or destroyer escort present in the area at all times, and one submarine present for part of the year; and shore support units.

Army—An Australian Army infantry company is maintained at Butterworth on a basis of three month detachments from Australia in a training role.

Air Force—Two squadrons of Mirage fighter aircraft are maintained at Butterworth in Malaysia, with a detachment at Tengah in Singapore.

In Papua New Guinea, elements of all three arms of the Defence Force play a major role in the development of the Papua New Guinea Defence Force.

The Commonwealth Government maintains an on-going program of defence co-operation with other neighbouring countries and provides transport support for United Nations activities in selected Asian areas.

Royal Australian Navy

The R.A.N. maintains and exercises a modern, well equipped and highly trained maritime force. The structure of this force is based primarily on the provision, at sea, of a balanced naval task group, consisting of surface warships, naval aviation, and the R.A.N.'s submarine force.

Development of the Royal Australian Navy

Information relating to naval defence systems prior to 1901 appears in Year Book No. 2 page 1094. Further information relating to the development of Australian naval policy appears in Year Books No. 3 and 12, pages 1060 and 1012 respectively; an account relating to the building of the Australian Navy, its cost, the compact with the Imperial Government, and other details, appears in Year Book No. 15, pages 921–3; and the growth and the activities of the R.A.N. during the 1939–45 war are described in Year Book No. 36, pages 1023–7.

Higher organisation

Under the Defence Act the Chief of Naval Staff has command of the R.A.N., subject to the overall command of the Defence Force by the Chief of Defence Force Staff. Principal staff officers to the Chief of Naval Staff are the Deputy Chief of the Naval Staff, and the Chiefs of Personnel, Technical Services, and Materiel. Other senior officers of the R.A.N. include the Flag Officer Commanding the Australian Fleet and the Flag Officer Commanding East Australia area.

Ships of the Royal Australian Navy

The Fleet, February 1976: *Melbourne*–aircraft carrier; *Supply*–oiler; *Stalwart*–destroyer tender; *Perth*, *Hobart*, *Brisbane*–guided missile destroyers; *Vendetta*, *Vampire*–destroyers; *Yarra*, *Parramatta*, *Stuart*, *Derwent*, *Swan*, *Torrens*–destroyer escorts; *Duchess*–training ship (destroyer); *Curlew*, *Snipe*–coastal minehunters; *Ibis*–coastal minesweeper; *Moresby*, *Flinders*–Surveying ships; *Diamantina*, *Kimbla*–oceanographic research ships; *Oxely*, *Otway*, *Onslow*, *Ovens*–submarines; *Attack*, *Acute*, *Advance*, *Adroit*, *Ardent*, *Assail*, *Aware*, *Barbette*, *Barricade*, *Bayonet*, *Bombard*, *Buccaneer*–patrol boats; *Banks*, *Bass*–general purpose vessels; *Brunei*, *Labuan*, *Tarakan*, *Wewak*, *Betano*, *Balikpapan*–heavy landing craft.

In operational reserve, February 1976: *Hawk*, *Gull*, *Teal*–minesweepers.

Fleet Air Arm

The Fleet Air Arm maintains three front line squadrons for embarkation in the operational carrier H.M.A.S. *Melbourne*. These squadrons currently consist of Skyhawk A4G fighter ground-attack aircraft, Tracker S2E anti-submarine aircraft and Sea King Mk 50 anti-submarine helicopters. Three training and support squadrons are based at the R.A.N. Air Station, Nowra, New South Wales. Other aircraft operated by the Navy are the Bell 206B helicopter in the survey ship HMAS *Moresby*, Iroquois UH1B and Wessex 31B helicopters (utility tasks and search and rescue), HS-748, Macchi trainer and Jindivik pilotless target aircraft.

Ship construction and repairs

There are two naval dockyards, one at Garden Island, New South Wales, and one at Williamstown, Victoria. The Dockyard at Cockatoo Island, which is operated by Vickers Cockatoo Dockyard Pty Ltd by agreement with the Commonwealth Government, carries out considerable naval repair work and has the capability to construct warships.

Current construction projects include two Oberon Class submarines in the United Kingdom, two guided missile frigates in the United States of America and an oceanographic vessel being built at Williamstown. Modernisation of three River Class destroyer escorts, *Parramatta*, *Stuart* and *Derwent* and the half-life refit of a fourth, *Yarra*, are currently being planned.

Extensive improvements to the weapon control systems of the guided missile destroyers *Hobart*, *Perth* and *Brisbane* are being progressed at Garden Island Dockyard.

Personnel

At 29 February 1976, the actual strength borne for full-time duty was 16,172 comprising 2,123 officers and 14,049 sailors, male and female. These figures include 64 officers, 19 sailors of the Citizen Naval Force, 2 officers of the Royal Australian Naval Emergency Reserve, 2 officers and 4 sailors on loan to the Indonesian Navy and 31 officers and 57 sailors serving with the Papua New Guinea Defence Force.

Women's Services

The present Women's Royal Australian Naval Service was reconstituted in January 1951. The numbers serving in shore establishments in February 1976 were 29 W.R.A.N.S. officers and 785 W.R.A.N.S. The Royal Australian Naval Nursing Service was inaugurated in November 1964, and its strength in February was 23 officers.

Naval Reserves

The Australian Naval Reserves consist of the R.A.N. Emergency Reserve, R.A.N. Emergency List, Royal Australian Fleet Reserve, Royal Australian Naval Reserve (R.A.N.R.), and Womens Royal Australian Naval Reserve. The authorised establishment of the combined Reserve force is 12,000. At 29 February 1976 there were 1,395 officers and 3,965 sailors in the Naval Reserves of which 300 officers and 775 sailors had training obligations. These figures exclude 66 officers and 19 sailors carrying out full-time service with the R.A.N.

The R.A.N.R. is the training reserve of the Naval Reserves. Members carry out weekly training and thirteen days continuous training annually; sailors engage for periods of three years. Other reserves do not normally carry out part-time training, but members may volunteer for periods of annual training, and for periods of full-time service with the R.A.N.

Training and entry

On entry, General List officers are trained at the Royal Australian Naval College H.M.A.S. *Creswell* at Jervis Bay, New South Wales. The College was established to provide trained officers for the R.A.N. Junior entry to the College is at the age of fifteen to seventeen years and senior entry at a maximum age of twenty years. In February 1976 there were 172 cadet midshipmen under training. On completion of initial training, officers go to the Fleet for sea training, followed by advanced training either ashore in Australia, at universities or technical colleges, or at Royal Navy training establishments in the United Kingdom.

H.M.A.S. *Cerberus* at Westernport, Victoria, is the main training establishment for adult sailors in the permanent naval forces, while several advanced training schools are established in New South Wales. The period of initial engagement for sailors varies from six years for tradesmen to nine or twelve years, and on completion sailors may re-engage for shorter periods up to the age of fifty-five.

H.M.A.S. *Nirimba* at Quakers Hill, New South Wales, is the naval school for apprentices. It provides secondary education, as well as technical training in trades, to boys aged fifteen to seventeen and a half years. The school was established in 1956 to meet the R.A.N.'s increased demand for highly skilled tradesmen. In January 1976 there were 477 naval apprentices under training.

H.M.A.S. *Leeuwin* at Fremantle, Western Australia, is the junior recruit training establishment. Entrants must be aged between fifteen and a half and sixteen and a half years. Training lasts one year and instruction is mainly academic, the remaining time being devoted to basic naval and disciplinary training. On completion of the course sailors are posted to technical and specialist courses before proceeding to sea. In January 1976 there were 728 junior recruits undergoing training.

On completion of initial training sailors join the Fleet for sea training before returning to the various training schools at H.M.A.S. *Cerberus*, H.M.A.S. *Penguin* and H.M.A.S. *Watson* at Sydney and R.A.N. Air Station at Nowra, New South Wales. Sailors who are selected for the submarine service receive initial submarine training in the United Kingdom and a number of technical courses for certain sailors are conducted in the United States of America.

To meet increasing requirements for officers, direct entries are accepted into the R.A.N. Short service commissions of seven years are granted on completion of training as seamen, supply or aircrew officers, to suitable applicants who have completed their secondary schooling and who are over seventeen years of age and under twenty-four years of age. Other direct entries may be approved outside these age limits from persons with appropriate qualifications and experience.

Opportunities exist for university undergraduates studying medicine, dentistry and engineering to enter the R.A.N., and on successful completion of their studies to commence short or full-time service in the Navy. Fully qualified doctors, dentists, engineers, instructors and legal officers may also enter the R.A.N. directly if they are of the appropriate age.

Australian Army

The Australian Army maintains a potential ability and readiness to conduct operations on land for the defence of Australia, and, in co-operation with the other arms of the Australian Defence Force shares a responsibility to deter aggression, and to ensure the nation's security and to preserve its national interests.

Development of the Australian Army

A detailed account of the Australian Defence Force prior to Federation appears in Year Book No. 2, pages 1075–81 *See* also Year Book No. 12, page 999. For particulars of the phases which cover the period from Federation up to the re-establishment of the Military Board and the organisation of Commands after the 1939–45 War—*see* Year Book No. 46 and earlier issues.

Higher organisation

Command of the Army is the responsibility of the Chief of the General Staff, subject to the overall Command of the Defence Force by the Chief of Defence Force Staff and he has for his principal staff officers, the Deputy Chief of the General Staff, the Chief of Operations, the Chief of Personnel, the Chief of Materiel, the Chief of the Army Reserve and the Inspector General of the Army Reserve.

The Army is organised into three functional Commands as follows:

Field Force Command which commands all field force units of the Australian Army, both Regular and Citizen Military Forces.

Logistics Command which commands all logistic elements of the Army.

Training Command which is responsible for all individual training and commands all Army training and schools with the exception of the Royal Military College, Duntroon.

Military Districts as listed below provide administrative support for the three functional Commands:

1st Military District—the State of Queensland.
2nd Military District—the State of New South Wales, less those parts included in 3rd and 4th Military District.
3rd Military District—the State of Victoria and part of Southern New South Wales.
4th Military District—the State of South Australia, plus a portion of south-western New South Wales.
5th Military District—the State of Western Australia.
6th Military District—the State of Tasmania.
7th Military District—the Northern Territory.

The Military District headquarters also handle those matters in which both Commonwealth and State Governments are involved.

Personnel strength

The effective strength at 25 February 1976 was: Australian Regular Army, 31,551 (including 30,029 males and 1,522 females (Women's Services)); Citizen Military Forces, 19,752.

Women's Services

In July 1950 approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment commenced into the Royal Australian Army Nursing Service in November 1950 and into the Australian Women's Army Corps early in 1951. In February 1951 the Royal Australian Army Nursing Service became a Corps and was designated the Royal Australian Army Nursing Corps (R.A.A.N.C.). During June 1951 the Australian Women's Army Corps was redesignated the Women's Royal Australian Army Corps (W.R.A.A.C.). The Women's Services in the Australian Regular Army and Citizen Military Forces now comprise these two corps.

Training

Staff College. Until 1938, the training of staff officers was carried out in the various Military Districts. In some cases officers were selected to attend courses abroad. In 1938 an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney was established. Between 1939 and 1945 the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war. Early in 1946 the Staff School (Australia) was established at Seymour, Victoria, and redesignated the Staff College in conformity with other British Commonwealth training establishments for training officers for command and staff appointments. The College was later moved to Queenscliff, Victoria, where it is presently situated. The course is held annually and is of twelve months duration. The normal intake is eighty students. The course is designed to train selected officers for appointments in all branches of the staff in peace and war and to prepare them to assume, after experience, command and higher staff appointments.

Students from Canada, Fiji, India, Indonesia, Malaysia, New Zealand, Pakistan, Papua New Guinea, the Philippines, Thailand, United Kingdom and United States of America are included in the course. Vacancies on each course are reserved also for officers who may be nominated by the R.A.N., the R.A.A.F. and the Australian Public Service.

In order to ensure common standards in tactical doctrine, and staff and command training, liaison is maintained with other Australian and overseas Staff Colleges, and to this end there is also a reciprocal exchange of instructors between the United Kingdom, the United States of America, and Australia. An instructor is also provided by New Zealand.

Royal Military College. The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory to provide trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations. The course is four years of military and academic studies. The first three years are primarily academic and the fourth year military. Following affiliation with the University of New South Wales a faculty of Military Studies was introduced in 1968. Cadets who meet the requirements for admission to the Faculty may take a course leading to the award of a degree in Military Studies by the University of New South Wales in one of the following: Arts, Applied Science or Engineering. On graduation, cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces. Since 1967 one Singaporean and three Thai cadets have graduated and presently (1976) one Malaysian, three Singaporean and three Thai cadets are attending the College.

Officer Cadet School. The Officer Cadet School was established in 1951 at Portsea, Victoria, to increase the rate at which junior regimental officers could be produced for the Australian Army. Serving members of the Regular Army, the Citizen Military Forces and civilians between the ages of eighteen and a half and twenty-two and a half are eligible for entrance. A special entry, provides for candidates up to twenty-four and a half years. The course lasts for forty-four weeks, and on graduation cadets are appointed second lieutenants in the Australian Regular Army. Graduates normally proceed to further training at the Army School of the Arm or Service to which they have been allotted before being posted to regimental duties. The Officer Cadet School also trains officers on occasions for Kenya, Malaysia, New Zealand, Thailand, the Phillipines, Singapore, Fiji, Brunei, and the Papua New Guinea Defence Force

Women's Royal Australian Army Corps School. The W.R.A.A.C. School, established in 1952 at Mildura, Victoria, moved to Mosman, New South Wales, in 1958. It has three wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., one for the training of non-commissioned officers at all levels and for other special courses, and one which is a basic training wing. The officer cadets are selected from eligible applicants, who may be serving members between nineteen and a half and thirty-two years of age, or civilians between nineteen and a half and thirty years of age. The course is of twenty-two weeks duration and on graduation cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

Army Apprentices School. The Army Apprentices School was opened in 1948 at Balcombe, Victoria, to train youths as skilled tradesmen for the Regular Army and to provide them with a background for an Army career with prospects of promotion for the graduates. The course is open to youths between the ages of fifteen and seventeen and provides training in a number of highly skilled trades. Most apprentices attend two years of intensive theoretical and practical work at the Apprentices School followed by two years on-the-job training in an appropriate Army workshop or technical unit under the supervision of an Apprentice Master. Radio tradesmen train for three years at the Apprentice School before undertaking one year on-the-job training. All apprentices take the Victorian Apprenticeship Commission final grade public examination, which ensures that they will be accepted as qualified tradesmen in civilian life when they leave the Army. In addition to the trade and military training, the Apprentices School provides the facility for apprentices to attain an educational standard of Victorian Technical Leaving.

Other Schools. Army schools have been established for the major arms and services to train officers and other ranks in the up-to-date techniques of their own arm or service, to qualify them for promotion and to produce trained instructors. Courses at Army schools are conducted for members of both the Regular Army and Citizen Military Forces. The following Army schools have been established: Land Warfare Centre, Armoured Centre, School of Artillery, School of Military Engineering, Transportation Centre, School of Military Survey, School of Signals, Infantry Centre, Army Aviation Centre, Army Intelligence Centre, Royal Australian Corps of Transport Centre, Royal Australian Army Medical Corps, School of Army Health, Royal Australian Army Ordnance Corps, Royal Australian Electrical and Mechanical Engineers Training Centre, Royal Australian Army Provost School, School of Music, Air Support Unit (Army Component), and Air Movement Training and Development Unit (Army Component).

Royal Australian Air Force

The function of the Royal Australian Air Force is the conduct of operations in the air for the defence of Australia and Australian interests.

Development of the Royal Australian Air Force

For a short note about the development of the Royal Australian Air Force, *see* Year Book No. 58, page 91.

Higher organisation

The Chief of the Air Staff (C.A.S.) has command of the Royal Australian Air Force subject to the overall command of the Defence Force by the Chief of Defence Force Staff. The C.A.S. is assisted in his decisions by an advisory committee the membership of which comprises the Chief of the Air Staff (Chairman), Deputy Chief of Air Staff, Chief of Air Force Personnel, Chief of Air Force Materiel, Chief of Air Force Technical Services, Director General Supply—Air Force, and other senior officers or specialists as may be directed by the C.A.S. The Committee has no statutory authority nor executive function and the C.A.S. is not obliged to accept its recommendation.

The Chief of Air Staff administers and controls R.A.A.F. units in Australia through two commands: Operational Command and Support Command. Operational units based at Butterworth, Malaysia, work within the broad directives issued by the C.A.S. They contribute toward the development of the Malaysian and Singapore defence capability and provide forces for the Integrated Air Defence System.

Operational Command is responsible to the C.A.S. for the command of operational units and the conduct of their operations within Australia. Support Command is responsible to the C.A.S. for training of personnel, and the supply and maintenance of service equipment.

Structural organisation

The R.A.A.F. has five operational elements, the units of which, actively and directly participate in air operations. These elements are the Strike/Reconnaissance Force, Tactical Fighter Force, Air Transport Force, Tactical Air Support Force and the Maritime Force. The role of the strike/reconnaissance force is primarily counter air operations. The tactical fighter force is responsible for air superiority, air defence and air interdiction operations, and also provides close air support to sea and land forces. The air transport force is used for routine logistic and domestic transport, and in addition has a tactical transport role. Tactical transport and close air support aircraft normally operate within a tactical air support force which is usually controlled by a joint (Air Force/Army) headquarters. Maritime forces are primarily employed in ocean surveillance, anti-submarine warfare and search and rescue. Major maritime operations are controlled by a joint (Air Force/Navy) headquarters.

The support component consists of those units and personnel which support units of the operational component. The elements are Maintenance Supply, Air Training, Ground Training, Administrative and the Citizen Air Force.

Aircraft

The R.A.A.F.'s strike/reconnaissance force is currently equipped with F111C and Canberra aircraft. The air defence and ground attack squadrons are equipped with the Mirage 111-0. Transport aircraft currently in use are Hercules C130A and C130E, Caribou, Dakota, Mystere 20, HS748, and BAC1-11. Three squadrons operate Iroquois and Chinook helicopters and the two maritime squadrons operate Neptune SP2H and Orion P3-B aircraft. Aircraft used for basic training are the CT4 Airtrainer, Macchi and HS748.

Personnel (including Reserve and Women's Services)

At 29 February 1976 the Permanent Air Force establishment was 22,796 and the Citizen Air Force 600; the actual strength was Permanent Air Force 21,368 and Citizen Air Force 452, while the strength of the General Reserve was 6,212. The Permanent Air Force figures include the Women's Royal Australian Air Force which has an establishment of 931 and actual strength of 1,014, the R.A.A.F. Nursing Service which is established for 99 and actually has 86, and 6 female doctors, dentists and education officers.

Training, entry

Staff College. The R.A.A.F. Staff College, located at Fairbairn, A.C.T., provides staff training and higher Service education to selected officers normally of the rank of Squadron Leader. The course, which is of a nominal year's duration is designed to broaden the students' professional background and to prepare them for command and staff appointments of greater responsibility. A two year correspondence course covering communication skills, military studies, international affairs and management is a compulsory prerequisite for entry to this course.

R.A.A.F. Academy. R.A.A.F. College was formed at Point Cook, Victoria in 1947 to provide a tertiary level professional education for future permanent officers. In 1961 the College was reconstituted as R.A.A.F. Academy to become an affiliated college of the University of Melbourne. Cadets are selected principally for the General Duties Branch and undertake a four year course at the Academy, leading to a Bachelor of Science degree after three years and the award of a Graduate Diploma in Military Aviation on completion of the fourth year. Some cadets selected for the Engineer Branch complete first year at R.A.A.F. Academy and then proceed to the University of Sydney to complete the remaining three years of the Bachelor of Aeronautical Engineering Course.

Diploma Cadet Squadron. The Diploma Cadet scheme provides training for cadets selected to undertake diploma studies in aeronautical, mechanical, electrical and communication engineering at the Royal Melbourne Institute of Technology and other Institutes of Technology in the Melbourne area. Cadets selected for Equipment Branch duties were originally located with the engineering cadets in Melbourne and undertook their studies at the Royal Melbourne Institute of Technology. This function has now been transferred to No. 7 Stores Depot at Toowoomba, Queensland where the cadets now undertake the three year course leading to the Bachelor of Business Studies degree at the Darling Downs Institute of Advanced Education.

Undergraduate Scheme. Students undertaking courses in medicine, dentistry, engineering (all branches) and science as undergraduates at any Australian University may be sponsored in advanced years under the Undergraduate Scheme. On completion, the students are commissioned in the specialist branches of the R.A.A.F.

Officer Training. With the exception of those officers commissioned from R.A.A.F. Academy or the flying training schools, all officers entering directly (with or without a tertiary qualification), commissioned airmen and airwomen, engineering and equipment cadets and undergraduate students undergo the Officers' Initial Training Course at the Officers' Training School, Point Cook, Victoria.

Basic Aircrew Training. R.A.A.F. pilot, navigator and air electronic officer trainees are selected primarily direct from civilian life although some places are filled by serving officers (including graduates of R.A.A.F. Academy) and airmen. Direct entry and serving airmen trainees are commissioned on graduation, having completed their officer training concurrently with their flying training.

The initial phase of basic pilot training for R.A.A.F., R.A.N. and Army trainees is conducted by No. 1 Flying Training School at R.A.A.F. Base Point Cook, Victoria. The final phase for R.A.A.F. and R.A.N. students is conducted by No. 2 Flying Training School at R.A.A.F. Base Pearce, Western Australia whilst Army students complete their training with the Army at Oakey, Queensland.

Basic navigator, air electronic officer and R.A.N. observer training is conducted by the R.A.A.F. School of Air Navigation at R.A.A.F. Base East Sale, Victoria. The School of Air Navigation also conducts post-graduate advanced navigation training for R.A.A.F. and R.A.N. pilots, navigators and observers.

Central Flying School conducts basic flying instructor training for the R.A.A.F., R.A.N. and Army at R.A.A.F. Base East Sale. In addition it conducts basic air traffic control training for all three armed services and, in conjunction with No. 1 Flying Training School, basic pilot training for the Papua New Guinea Defence Force.

Basic loadmaster, flight engineer and crewman training for transport, maritime and helicopter aircraft is conducted by training flights within the appropriate operational squadron. Students for this training are selected from volunteer serving airmen.

Aircrew Operational Conversion Training. With the exception of Mirage pilot conversion training which is conducted by No. 2 Operational Conversion Unit at R.A.A.F. Base Williamtown, New South Wales, all other aircrew undergo conversion training to operational aircraft types with a training flight within the appropriate operational squadron.

Ground Training. Training for non-aircrew personnel is generally provided in two stages: Basic and Advanced. Basic training, which includes apprentice training, brings the airman to a level of proficiency in his particular trade such that he can be recognised and employed as a qualified tradesman on an operating unit. Advanced training covers higher level training courses including supervision and management techniques, and specialist courses on particular aircraft or telecommunications systems.

Major Training Schools. The major ground training schools in the R.A.A.F. are the School of Radio at Laverton, Victoria, and the School of Technical Training at Wagga, New South Wales. The School of Radio averages a trainee population of about 400 while the School of Technical Training has over 800 members under training at any time. Apprentice training for radio tradesmen is provided at Laverton, while apprentice training for other engineering trades is provided at Wagga. In addition, both schools provide training for adult-entry airmen and airwomen. Although training for airwomen is generally confined to the non-technical areas, many courses are now common to both airmen and airwomen.

Civil Recognition. Because the training of R.A.A.F. apprentices is conducted in more than one State, the R.A.A.F. has elected to obtain civil recognition of apprentice-trained tradesmen on a national basis through the provision of the Tradesmen's Rights Regulation Act, rather than be directly associated with the State apprenticeship authority. Recognition of adult-trained tradesmen is similarly obtained under the Tradesmen's Rights Regulation Act.

Civil Schooling Scheme. To meet the needs of the R.A.A.F. in a variety of disciplines in which it is uneconomical for the Service to set up its own training schemes, serving officers and airmen are sponsored at universities and advanced colleges/institutes to undertake full or part time tertiary level study mainly in the fields of engineering, science, economics, business administration, manage ment, accountancy and education. Members studying under this scheme are located on and administered from bases throughout the country.

DEFENCE PRODUCTION

The functions previously performed by the former Department of Supply (*see* Year Book No. 60, page 105) were during 1974 and 1975 re-distributed between the Departments of Defence (research and development functions, defence production in industry, guided weapons and electronic support facility), Administrative Services (Stores and Transport, and purchasing functions), and a new Department of Manufacturing Industry which absorbed also the functions of the Department of Secondary Industry. In December 1975 the Department of Manufacturing Industry was re-named the Department of Industry and Commerce, absorbing *inter alia* the Shipbuilding Division of the Department of Transport.

Defence production functions of Department of Industry and Commerce

The defence production functions of the Department of Industry and Commerce are carried out under the *Supply and Development Act* 1939 and include the following:

> Planning, establishment, operation and management of facilities producing aircraft, guided missiles, small arms, ammunition, explosives, marine engines, clothing and other defence goods. Acquisition, maintenance, and disposal of strategic materials, investigation and development of Australian sources of supply of defence materiel in conjunction with Department of Defence.

For the performance of the above functions the Department has two production divisions:

> Munitions Supply; and Aircraft, Guided Weapons and Electronics Supply; supported by Production Planning Branch, Marketing Branch and elements of Central Office and Regional technical and administrative staffs.

Munitions supply

The Munitions Supply Division is responsible for the production of munitions required by the Defence Force. Production is carried out in Government factories, which may place orders with private industry for components and materials. The factories currently in operation and their main products or services are as follows:

> Ammunition Factory, Footscray, Victoria (fuses, primers, cartridge cases and small arms ammunition); Clothing Factory, Victoria (uniforms and clothing); Engine Works, Victoria (building and servicing of marine diesel engines); Albion Explosives Factory, Deer Park, Victoria (high explosives, propellants, chemicals); Explosives Factory, Maribyrnong, Victoria (propellants, explosives, chemicals, ammunition, rocket motors, paints, cements, and allied products); Mulwala Explosives Factory, New South Wales (propellants and chemicals); Munitions Filling Factory, St Marys, New South Wales (ammunition and explosive munitions); Ordnance Factory, Bendigo, Victoria (heavy guns, mountings, large gears); Ordnance Factory, Maribyrnong, Victoria (guns, projectiles, heavy forgings, rocket motor components); and Small Arms Factory, Lithgow, New South Wales (rifles, machine guns, mortar shells, calibre shells and fuse components).

Aircraft, guided weapons and electronics supply

Aircraft. Production both in Government factories and in industry of aircraft and aero-engines and of other aircraft components is the responsibility of this Division. Planning of capacity and negotiation (in conjunction with the government purchasing authority) of contractual arrangements concerning aircraft modification, repair and overhaul, and for the supply of spare parts and airborne equipment for the Services, are also functions of the Division.

The following factories are operated by the Division: Government Aircraft Factory at Fishermen's Bend, Victoria together with its Final Assembly Workshops and Test Airfield at Avalon, Victoria and the Aircraft Engineering Workshop at Pooraka, South Australia.

The Government Aircraft Factories (G.A.F.) have designed and developed a twin turbo-propellor utility aircraft known as Nomad. Production of 70 aircraft was approved by the Government. Sales have been made to Commonwealth Government Departments (including Defence (Army)) and overseas countries. G.A.F. also designed and is producing the Jindivik radio-controlled target aircraft which has been supplied to Britain, Sweden and America as well as to the Department of Defence. Turana, a small jet-engine powered, pilotless target aircraft in production for the Royal Australian Navy is of G.A.F. design and is produced in the Factories.

The Commonwealth Aircraft Corporation Ltd (C.A.C.) Fishermen's Bend, Victoria, was the prime contractor for the Australian production for the R.A.A.F. and R.A.N. of the Italian Macchi jet trainer and for the production of the British Viper engine that powers this aircraft. The C.A.C. is the major Australian contractor for the Bell light observation helicopter which is being produced for the Australian Army. Hawker de Havilland Australia Pty Ltd at Bankstown and Lidcombe New South Wales was the major sub-contractor for the Macchi. Macchi trainer production for the R.A.A.F. and R.A.N. was completed in 1972.

Guided Weapons. The production of the Ikara anti-submarine system is continuing at the Government Aircraft Factory at Fishermen's Bend. Excluding the torpedo, production of the system, covering broadly the torpedo carrying flight vehicle and its motor, launcher and magazine handling equipment and guidance and tactical control equipment is a combined effort by departmental establishments and industry, directed and co-ordinated by the Department. Ikara has been fitted to 9 R.A.N. ships and variants have also been purchased by the British and Brazilian Navies.

Planning and marketing

The Production Planning Branch is responsible for co-ordination, in conjunction with the production divisions, of the provision of defence production capability in the Government factories and aircraft industry to meet the Defence Force requirements. Within defence policy guidelines the Branch provides and administers reserve stocks of materials and reserve pools of plant, equipment and other requirements needed for rapid expansion in the event of war.

The Marketing Branch undertakes sales of Departmental products and services; administers Department of Industry and Commerce and Department of Defence patents and licensing arrangements; co-ordinates and monitors Australian Industry Participation programs arising from major Government purchases from overseas; co-ordinates with Department of Defence the development of co-operation between Australia and New Zealand in the defence supply field.

Finance

The total expenditure on Defence-orientated Department of Industry and Commerce activities in 1974–75 was $250,750,000. This was made up of $74,648,000 from Parliamentary Appropriations, $170,093,000 from Trust Fund Accounts and $6,009,000 from revenue.

Personnel

At 31 December 1975, 9,311 personnel were employed on specifically defence orientated functions (excluding general financial and administrative management support) as follows: administration 767; aircraft production 2,481; munitions production 5,189; miscellaneous production 846; cadets and trainees 20; overseas staff 8.

PURCHASING

The Office of the Purchasing Commission, a Division of the Department of Administrative Services, arranges for the purchase within Australia of supplies and services for the Australian Navy, Army and Air Force and for Department of Industry and Commerce factories and establishments. Purchase of supplies from overseas sources is arranged and progressed by the Department of Defence. Upon request, the Office also arranges contracts on behalf of other Commonwealth Government departments and authorities. The Office also arranges disposal—by means of public tender, auction or otherwise—of stores no longer required for Commonwealth Government purposes.

Purchases by the Office of the Purchasing Commission in 1974–75 totalled $185 million. Total realisation from disposals in 1974–75 was $17 million.

CHAPTER 5

REPATRIATION

On 5 October 1976 the name of the Department of Repatriation was changed to the Department of Veterans' Affairs.

The Repatriation Commission, established under the *Repatriation Act* 1920, consists of three full-time members. It is responsible for the administration of the Repatriation Act and associated legislation, all matters of policy, and the general administration and overall supervision of the Department of Repatriation. The Chairman of the Commission is also the Secretary of the Department of Repatriation, which provides the administrative machinery through which the Commission operates. The central office is in Canberra and there is a branch office, under the control of a Deputy Commissioner, in each State.

The principal functions of the Department are: the payment of disability and dependants' pensions (previously called war pensions) and service pensions and allowances to eligible veterans and their dependants; the provision of medical treatment for veterans for injuries and illnesses caused or aggravated by their service; the provision of medical treatment in certain circumstances for veterans who are suffering from injuries and illnesses not caused or aggravated by service; the provision of medical treatment for widows and dependants of deceased veterans whose deaths are service-related; and a wide range of other benefits for eligible persons.

Benefits are provided in respect of service, not only in the 1914–18 and 1939–45 Wars, but also in the South African War 1899–1902, the Korea and Malaya operations, with the British Commonwealth Far East Strategic Reserve and the Special Overseas Forces serving in prescribed areas, and in the Regular Defence Forces in certain circumstances.

For information on war service land settlement *see* Chapter 22, Rural Industry; for statistics relating to defence service homes *see* Chapter 9, Housing and Building.

For detailed information about repatriation pensions, allowances, benefits and services, reference should be made to the annual reports of the Repatriation Commission.

REPATRIATION: TOTAL EXPENDITURE(*a*)
($'000)

Class	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Pensions, allowances and other benefits	240,539	266,107	303,183	362,196	477,608
Medical treatment	74,627	87,328	97,297	120,446	162,340
Administration	16,700	18,913	20,791	24,807	32,143
Works, rent and maintenance	7,981	5,301	6,870	8,903	14,792
Total expenditure	**339,847**	**377,649**	**428,141**	**516,352**	**686,883**

(*a*) Includes expenditure by Departments other than Repatriation as follows: 1970–71, $5,852,357; 1971–72, $4,982,764; 1972–73, $6,645,558; 1973–74, $8,369,015; 1974–75, $14,088,376.

Disability and dependants' pensions

The first provision for the payment of disability pensions to veterans and pensions to their dependants was made by the Commonwealth Parliament in the *War Pensions Act* 1914. This Act was repealed in 1920 by the *Australian Soldiers' Repatriation Act* 1920 (amended from 31 December 1950 to the Repatriation Act). Amendments to the Act in 1943 considerably widened the eligibility provisions, to the benefit mainly of members of the Citizen Military Forces who had not served outside Australia during the 1939–45 War.

For a brief description of eligibility for disability and dependants' pensions; the conditions for payment of the various rates and allowances; and of operation of the Appeals Tribunals, *see* pages 91–93 of Year Book 55, Chapter 5, Repatriation.

Pensions and allowances

Disability and dependants' pensions and associated allowances are not subject to a means test, except in the case of dependants other than wives, widows, widowed mothers and children. Pensions and allowances payable and the main weekly rates from 6 May 1976 are as follows.

Pensions for service-related incapacity—Special Rate (totally and permanently incapacitated (T. & P.I.) or blinded), $78.85; an equivalent rate is payable for temporary total incapacity or to a veteran pensioned for pulmonary tuberculosis who is, as a result, unfit for employment; *Intermediate Rate*. (Capable of part-time work only), $54.30; veterans pensioned for pulmonary tuberculosis and able only to work part-time receive the same rate; *General Rate* (capable of full-time employment), 100 per cent basic rate, $29.80. *Dependants*—Pensions are also payable to the dependants of incapacitated veterans: Wife, $4.05; eligible children, $1.38; (Maximum rates).

Pensions in respect of death—War and defence widows (where death was related to war or defence service or, at the date of death, the veteran was receiving a disability pension at the Special Rate, or its equivalent in respect of pulmonary tuberculosis, or as a double amputee) $41.25; eligible widows may also receive a domestic allowance, $12; *children* (under 16 years of age) or *student children* over 16 years of age undergoing full-time education, $10.45; double orphans (both parents deceased), $20.90.

Allowances—various allowances are provided to supplement disability and dependants' pensions and these vary according to the type and severity of disablement and the special needs of the pensioner. The main allowances and maximum weekly rates payable are: *Attendants allowance* (for the severely disabled), maximum $24.90; *Clothing allowances* (where clothing is subject to damage from surgical aids, etc.), from 55 cents to $1.05; *Domestic allowance* (payable to eligible war and defence widows), $12. Other allowances payable include: *Sustenance allowance; Fares, subsistence and attendance allowance; Recreation transport allowance; Funeral benefits, etc.*

Summary of disability and dependants' pensions

The following tables provide a summary of disability and dependants' pensions (excluding miscellaneous pensions) for the 1914–18 War, the 1939–45 War (including pensions payable under the *Interim Forces Benefits Act* 1947), the Korea and Malaya operations, the Far East Strategic Reserve, and the Special Overseas Service and the Regular Forces. Statistics relating to miscellaneous disability and dependants' pensions are shown later in this section.

DISABILITY AND DEPENDANTS' PENSIONS: SUMMARY, AUSTRALIA, 1974-75

		1914–18 War	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Serving Members*	*Total*
New claims granted .	No.	269	8,683	371	114	1,573	283	11,293
Restorations. . .	No.	15	2,806	98	18	46	. .	2,983
Claims disallowed(*b*) .	No.	170	2,802	53	5	322	555	3,187
Pensions cancelled (gross)	No.	79	17,651	794	110	461	15	19,110
Deaths of pensioners .	No.	4,959	7,523	52	6	34	. .	12,574
Pensions in force at 30 June 1975 . . .	No.	58,548	424,913	11,173	2,125	16,725	340	(*c*)513,824
Annual pension liability at 30 June 1975 .	$'000	77,593	246,598	3,189	431	3,041	79	330,931
Amount paid in pensions during the year 1974–75	$'000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	314,058

(*a*) Includes Interim Forces. (*b*) Number of veterans who had their claims for all their disabilities disallowed. (*c*) At 30 June 1975 includes 12,494 student children over 16 years of age.

DISABILITY AND DEPENDANTS' PENSIONS: SUMMARY, AUSTRALIA

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New claims granted	16,437	13,041	17,849	12,672	11,293
Restorations	569	240	2,254	2,356	2,983
Total additions	*17,006*	*13,281*	*20,103*	*15,028*	*14,276*
Pensions cancelled (gross)	20,158	17,826	15,619	18,149	19,110
Deaths of pensioners	11,990	12,124	11,674	11,642	12,574
Total reductions	*32,148*	*29,950*	*27,293*	*29,791*	*31,684*

Classes of disability and dependants' pensions

The following tables provide an analysis of the total number of new claims granted, pensions in force, and class of pension for 1974–75.

DISABILITY AND DEPENDANTS' PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA, 1974-75

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Serving Members*	*Total*
Veterans	42	1,884	59	18	216	104	2,323
Wives and widows of veterans	102	2,585	65	22	352	73	3,199
Children	9	4,121	245	73	999	106	5,553
Other dependants	116	93	2	1	6	..	218
Total	**269**	**8,683**	**371**	**114**	**1,573**	**283**	**11,293**

(*a*) Includes Interim Forces.

DISABILITY AND DEPENDANTS' PENSIONS IN FORCE: AUSTRALIA, 30 JUNE 1975

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Serving Members*	*Total(b)*
Veterans	15,507	176,441	3,479	609	5,700	132	201,868
Wives	22,046	158,887	2,811	509	4,259	83	188,595
Children	192	53,860	4,510	938	6,333	113	65,946
War widows	20,533	29,269	172	32	123	6	50,135
Children of deceased veterans	21	2,087	102	26	230	6	2,472
Orphans	3	112	6	..	1	..	122
Parents	19	3,643	84	9	77	..	3,832
Others	227	614	9	2	2	..	854
Total	**58,548**	**424,913**	**11,173**	**2,125**	**16,725**	**340**	**513,824**

(*a*) Includes Interim Forces. (*b*) Includes 12,494 student children over 16 years of age.

DISABILITY PENSIONS FOR INCAPACITATED VETERANS IN FORCE: BY CLASS OF PENSION AUSTRALIA, 30 JUNE 1975

Class	*1914–18 War*	*1939–45 War(a)*	*Korea and Malaya operations*	*Far East Strategic Reserve*	*Special Overseas Service*	*Serving Members*	*Total*
Special Rate (T. & P. I.) or equivalent . . .	4,231	13,794	140	7	37	3	18,212
Intermediate Rate . .	129	1,724	18	3	5	..	1,879
General Rate—from 10 per cent to 100 per cent assessed disability(*b*) . . .	11,147	160,923	3,321	599	5,658	129	181,777
Total . . .	**15,507**	**176,441**	**3,479**	**609**	**5,700**	**132**	**201,868**

(*a*) Includes Interim Forces. (*b*) Excludes 80 veterans who also receive benefits under items 1–6 of Schedule 5 and are included above under Special Rate (T. & P.I.) or equivalent.

Number of disability and dependants' pensions and annual liability, States, etc.

The following table shows the number of pensions in force and annual liability at 30 June 1975, according to place of payment.

DISABILITY AND DEPENDANTS' PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY, 30 JUNE 1975

	Number of disability and dependants' pensions in force at 30 June 1975(a)				
Place of payment	*Incapacitated veterans*	*Dependants of incapacitated veterans*	*Dependants of deceased veterans*	*Total*	*Annual pension liability at 30 June(b) ($'000)*
New South Wales(*c*) .	72,751	88,662	21,205	182,618	122,137
Victoria . . .	52,063	67,196	15,837	135,096	87,875
Queensland . .	32,541	42,419	7,975	82,935	53,119
South Australia(*d*) .	18,682	23,545	4,866	47,093	27,614
Western Australia .	16,737	20,958	4,026	41,721	23,197
Tasmania . .	8,219	11,231	2,013	21,463	14,520
Overseas . .	875	1,326	697	2,898	2,469
Total . .	**201,868**	**255,337**	**56,619**	**513,824**	**330,931**

(*a*) Includes Interim Forces 1939–45 War. (*b*) Includes domestic allowance payable to widows. (*c*) Includes Australian Capital Territory. (*d*) Includes Northern Territory.

Summary of disability and dependants' pensions, 1970-71 to 1974-75

The following table shows the number of pensions granted, claims rejected, pensions in force and the annual liability for pensions in each of the years ended 30 June 1971 to 1975.

DISABILITY AND DEPENDANTS' PENSIONS: SUMMARY, AUSTRALIA

			Number of disability and dependants' pensions in force at 30 June(a)				
Year	*Pensions granted*	*Claims disallowed (b)*	*Incapacitated veterans*	*Dependants of incapacitated veterans*	*Dependants of deceased veterans*	*Total*	*Annual pension liability at 30 June(c) ($'000)*
1970–71 . .	16,437	5,110	218,355	291,828	59,356	569,539	185,974
1971–72 . .	13,041	4,957	215,483	278,392	58,949	552,824	196,897
1972–73 . .	17,849	3,853	211,356	276,043	58,269	545,668	227,351
1973–74 . .	12,688	3,680	206,865	266,918	57,491	531,274	272,094
1974–75 . .	11,302	3,187	201,868	255,337	56,619	513,824	330,931

(*a*) Includes Interim Forces 1939–45 War. (*b*) The number of claimants who had the claims for all their disabilities disallowed. (*c*) Includes domestic allowance payable to widows.

The following table shows, for the years 1970–71 to 1974–75, the amounts paid in pensions and the places where they were paid.

DISABILITY AND DEPENDANTS' PENSIONS: AMOUNT PAID(*a*)
($'000)

Place of payment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales(*b*)	68,992	76,791	81,599	91,874	115,502
Victoria	52,546	57,357	60,739	67,329	83,673
Queensland	30,813	34,183	36,821	41,174	50,685
South Australia(*c*)	15,722	17,270	18,405	20,962	26,525
Western Australia	13,114	14,384	15,428	17,338	21,812
Tasmania	8,226	9,089	9,851	11,176	13,698
Overseas	1,595	1,573	1,646	1,832	2,162
Total	**191,008**	**210,647**	**224,489**	**251,685**	**314,058**

(*a*) Includes domestic allowances paid to widows. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Miscellaneous disability and dependants' pensions

The Commission is also responsible for the payment of pensions and allowances to beneficiaries under the *Seamen's War Pensions and Allowances Act* 1940 and Cabinet decisions granting eligibility to persons who were attached to the armed forces during war-time.

The following table shows the number and class of pensions and the annual liability at 30 June 1975, and the table thereafter shows the amounts paid during the years 1970–71 to 1974–75 and the place of payment.

MISCELLANEOUS DISABILITY AND DEPENDANTS' PENSIONS: NUMBER OF PENSIONS AND ANNUAL LIABILITY, AUSTRALIA, 30 JUNE 1975

	Number of pensions in force at 30 June 1975				
Class	*Veterans(a)*	*Dependants of veterans*	*Dependants of deceased veterans*	*Total*	*Annual pension liability at 30 June(b) ($'000)*
Act of grace	112	130	53	295	246
Seamen's war pension	64	70	52	186	164
New Guinea civilians	3	. .	59	62	150
Total	**179**	**200**	**164**	**543**	**560**

(*a*) 'Veterans' in this context is a person in respect of whose war-time experience a pension is paid. (*b*) Includes domestic allowances payable to widows.

MISCELLANEOUS DISABILITY AND DEPENDANTS' PENSIONS(*a*)
($'000)

Place of payment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales(*b*)	179	214	216	212	286
Victoria	90	107	124	130	164
Queensland	50	62	72	71	108
South Australia(*c*)	32	36	46	47	58
Western Australia	26	29	34	25	33
Tasmania	4	5	5	6	9
Overseas	1	1	1	1	1
Total	**382**	**454**	**498**	**492**	**659**

(*a*) Includes domestic allowance payable to widows. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Service pensions

The *Repatriation Act* 1920 provides for a service pension to be paid (subject to a means test on income and property, where the person is neither blind nor at least 70 years of age), to the following persons:

- male veterans who suffer from pulmonary tuberculosis or who served in a theatre of war (or in a designated *Operational* or *Special Overseas Service* area) and have attained the age of sixty years or are permanently unemployable;
- female veterans who suffer from tuberculosis, or who served in a theatre of war, or served abroad or embarked for service abroad and have attained the age of fifty-five years, or are permanently unemployable;
- veterans of the South African War 1899–1902 who were members of a naval or military force or contingent raised in Australia for active service in that war;
- veterans of other British Commonwealth Forces who served outside the country of enlistment or within that country if a campaign medal has been awarded in respect of such service. Ten years residence in Australia is a necessary qualification.

Rates of pension

Maximum service pension rates and allowances are the same as those paid to Age and Invalid pensioners under the Social Services Act. The means test provisions relating to payments are similar.

For information on conditions relating to the various rates and allowances and the operation of the means test, *see* Chapter 13, Welfare Services.

From 6 May 1976, the maximum weekly rates are as follows:

Standard Rate, $41.25, *Married Rate*, $34.25; *Guardian's Allowance*, $4 ($6 if caring for a child under 6 years or an invalid child requiring full-time care); *Supplementary assistance*, $5 (or $2.50 payable to each of a married couple); *Additional pension for eligible children*, $7.50 for each child.

A veteran in receipt of a service pension is entitled, with certain exceptions, to free medical benefits for disabilities not service-related. These benefits include general practitioner service, specialist service where necessary, full pharmaceutical benefits, surgical aids and appliances (including spectacles), dental treatment, and treatment in Repatriation General Hospitals.

SERVICE PENSIONS, SUMMARY, AUSTRALIA, 1974-75

	South African War	*1914–18 War*	*1939–45 War*	*Korea-Malaya operations*	*Special Overseas Service*	*Miscellaneous (a)*	*Total*
New claims granted	..	944	22,063	109	9	48	23,173
Restorations	..	44	367	1	..	2	414
Cancellations (gross)	..	735	3,179	16	4	6	3,940
Deaths	6	3,107	3,318	9	3	4	6,447
Pensions in force at 30 June 1975	40	28,892	92,259	390	15	130	121,726
Annual liability at 30 June 1975 $'000	57	43,765	136,751	581	20	190	181,364
Amount paid in pensions during 1974–75 $'000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	155,207

(*a*) Act of grace pensions.

SERVICE PENSIONS: SUMMARY, AUSTRALIA

	1970–71	*1971–72*	*1972–73(a)*	*1973–74*	*1974–75*
New claims granted	10,321	10,349	24,888	23,229	23,173
Restorations	680	794	1,384	641	414
Total additions	*11,001*	*11,143*	*26,272*	*23,870*	*23,587*
Cancellations (gross)	3,378	5,098	2,538	5,793	3,940
Deaths	5,276	5,135	5,238	5,692	6,447
Total reductions	*8,654*	*10,233*	*7,776*	*11,485*	*10,387*

(*a*) The increased number of new claims granted and restorations in 1972–73 were partly due to easing of the means test and to an ageing population of ex-service personnel.

Class of service pensions

The following tables give an analysis of the total number of new claims granted and pensions in force for 1974–75.

SERVICE PENSIONS: NEW CLAIMS GRANTED, AUSTRALIA 1974-75

Class	*South African War*	*1914–18 War*	*1939–45 War*	*Korea-Malaya operations*	*Special Overseas Service*	*Miscellaneous*	*Total*
Veterans	..	636	12,851	75	5	29	13,596
Wives and widows of veterans . . .	..	308	9,211	34	4	19	9,576
Children . . .	..	..	1	..	..	..	1
Total . . .	..	**944**	**22,063**	**109**	**9**	**48**	**23,173**

SERVICE PENSIONS: NUMBER IN FORCE, 30 JUNE 1975

State	*South African War*	*1914–18 War*	*1939–45 War*	*Korea-Malaya operations*	*Special Overseas Service*	*Miscellaneous*	*Total*
New South Wales(*a*) .	11	9,130	29,489	143	7	43	38,823
Victoria . . .	13	8,438	23,013	71	4	36	31,575
Queensland . . .	5	4,457	17,480	87	3	24	22,056
South Australia(*b*) . .	4	3,277	8,674	20	1	17	11,994
Western Australia . .	4	2,499	9,256	47	..	8	11,815
Tasmania . . .	3	1,088	4,265	17	..	2	5,370
Overseas	..	3	82	5	..	..	93
Total . . .	**40**	**28,892**	**92,259**	**390**	**15**	**130**	**121,726**

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

Number, by class, of service pensions and amount paid

The following tables show the number of each class of service pension in force, the annual liability and the amounts paid for the years 1970–71 to 1974–75.

SERVICE PENSIONS: NUMBER OF EACH CLASS OF PENSION AND ANNUAL LIABILITY AUSTRALIA

	Number of service pensions at 30 June payable to—								
	Veterans who are—			*Dependants(a) of veterans where the veteran is—*					
Year	*Aged veterans*	*Permanently unemployable*	*Suffering from pulmonary tuberculosis*	*An Aged veteran*	*Permanently unemployable*	*Suffering from pulmonary tuberculosis*	*Miscellaneous*	*Total*	*Annual pension liability at 30 June ($'000)*
1970–71 .	38,666	18,122	1,201	1,017	16,729	1,030	43	76,808	43,334
1971–72 .	39,657	17,668	1,203	1,186	16,922	1,028	49	77,713	51,432
1972–73 .	47,430	19,121	1,333	9,488	17,617	1,065	71	96,125	82,011
1973–74 .	56,069	19,182	1,416	15,512	15,384	852	(*b*)90	108,505	119,181
1974–75 .	62,443	19,292	1,425	22,115	15,432	889	(*b*)130	121,726	181,364

(*a*) Includes dependants of deceased service pensioners. (*b*) Includes British Commonwealth veterans.

NOTE. *See* footnote (*a*) last table previous page.

SERVICE PENSIONS: AMOUNT PAID
($'000)

Place of payment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales(*a*)	13,963	15,633	23,011	33,105	49.985
Victoria	10,696	12,075	18,033	26,532	40,180
Queensland	8,042	9,150	13,567	19,070	28,033
South Australia(*b*)	4,651	5,185	7,467	10,340	15,133
Western Australia	4,769	5,298	7,394	10,191	15,149
Tasmania	1,604	1,841	2,827	4,356	6,669
Overseas	7	12	17	32	58
Total	**43,732**	**49,194**	**72,316**	**103,626**	**155,207**

(*a*) Includes Australian Capital Territory. (*b*) Includes Northern Territory.

Medical treatment for veterans and dependants of veterans

Medical treatment is provided for all disabilities which have been accepted as being service-related In addition and subject to certain conditions, treatment is provided for disabilities not due to war service for: veterans receiving disability pensions at or exceeding the maxmium general (100 per cent) rate; veterans who have contracted pulmonary tuberculosis; veterans of the First World War including nurses; widows and certain dependants of veterans whose deaths have been accepted as service-related and of deceased T. & P.I. pensioners; and certain service pensioners, including service pensioners of the South African 1899–1902. Veterans who have contracted pulmonary tuberculosis may receive treatment for that condition. During 1972–73 nursing home-care benefits were extended to T. & P.I. and Intermediate Rate disability pensioners suffering from chronic non-service related disabilities and to war and defence widows, widowed mothers and First World War nurses.

Treatment is provided at the six Repatriation General Hospitals (one in each State) and five auxilary hospitals and an ANZAC hostel in Victoria. The total number of available beds for patients in wards of parts of wards, open for use in all these institutions at 30 June 1975 was 3,508 and expenditure during 1974–75 amounted to $75,061,851. In addition expenditure of $85,786,766 was incurred during 1974–75 on medical services outside these institutions.

Community patients. Where spare bed capacity exists in the Repatriation General Hospitals, patients may be admitted from the general community (mainly veterans with conditions that are not service-related, hospital staff and the local community).

Repatriation hospitals and institutions

Details of full-time staff in Repatriation general hospitals and other Repatriation institutions are given in the following table.

REPATRIATION HOSPITALS AND INSTITUTIONS: FULL-TIME STAFF
30 JUNE 1975

Type of institution	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
General hospitals—							
Medical staff(*a*)	170	93	52	31	22	12	380
Nursing staff	815	497	417	278	257	59	2,323
Other staff	1,278	901	539	407	480	137	3,742
Total, general hospitals	*2,263*	*1,491*	*1,008*	*716*	*759*	*208*	*6,445*
Other in-patient institutions(*b*)	274	138	234	29	54	..	729
Out-patient clinics(*b*)	178	76	22	32	31	..	339
Limb and appliance centres(*b*)	86	77	32	22	15	13	245
Grand total	**2,801**	**1,782**	**1,296**	**799**	**859**	**221**	**7,758**

a) Medical Officers only, excludes psychologists, speech therapists, etc. (*b*) Total staff.

The following table gives details of in-patients treated at Repatriation general hospitals and other Repatriation institutions in each State. The figures shown refer to treatment episodes, e.g. a person who is admitted to hospital twice during a year is counted twice.

REPATRIATION GENERAL HOSPITALS AND INSTITUTIONS: IN-PATIENTS TREATED, 1974-75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
REPATRIATION GENERAL HOSPITALS							
In-patients at beginning of year .	887	446	454	292	338	98	2,515
Admissions and re-admissions during year	17,160	10,147	9,925	5,815	7,198	1,621	51,866
Total in-patients treated .	*18,047*	*10,593*	*10,379*	*6,107*	*7,536*	*1,719*	*54,381*
Discharges	16,152	9,231	9,608	5,443	6,790	1,541	48,765
Deaths	982	860	391	383	409	94	3,119
In-patients at end of year . .	913	502	380	281	337	84	2,497
Average daily beds occupied .	847	464	404	267	314	82	2,377
OTHER REPATRIATION INSTITUTIONS							
In-patients at beginning of year .	192	115	149	..	41	..	497
Admissions and re-admissions during year	2,291	912	1,054	55	248	..	4,560
Total in-patients treated .	*2,483*	*1,027*	*1,203*	*55*	*289*	..	*5,057*
Discharges	2,153	863	976	31	241	..	4,264
Deaths	137	59	75	1	9	..	281
In-patients at end of year . .	193	105	152	23	39	..	512
Average daily beds occupied .	189	100	144	12	41	..	486

In addition to the Repatriation institutions, eligible patients are treated in other country and metropolitan hospitals and nursing homes at Repatriation expense. During 1974-75, 22,387 Repatriation in-patients were accommodated and treated in hospitals and 8,209 in nursing homes.

Repatriation psychiatric patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Department of Repatriation in separate wings of psychiatric hospitals administered by the State authorities. Excluding 66 on trial leave, there were 690 Repatriation patients in these hospitals at 30 June 1975.

Out-patient treatment is provided throughout Australia at Repatriation hospitals and clinics and through the Repatriation Local Medical Officer Scheme. During 1974-75, 635,290 out-patients were treated at Repatriation institutions, and visits to or by local medical officers totalled 2,651,338. The number of Repatriation local medical officers in Australia at 30 June 1975 was 6,717.

Artificial limb and appliance services

In each State the Department of Repatriation maintains a limb and appliance centre, catering for patients requiring artificial limbs, surgical aids and appliances. The centres fit eligible Repatriation patients and those from other Commonwealth Government departments and instrumentalities, and, when possible, patients from State Government and philanthropic organisations, and private persons who cannot be fitted satisfactorily elsewhere.

Details of production at all centres during 1974-75 are as follows: arms, 304; legs, 2,365; surgical and adapted footwear, 7,731; other surgical appliances, 1,614; and repairs, 28,925.

General Repatriation benefits and miscellaneous

Other Repatriation Department activities

In addition to the payment of pensions and the provision of medical treatment, the Department also provides various benefits and allowances designed to meet the needs of special classes of veterans and their dependants.

These include educational training schemes, namely the *Soldiers' Children Education Scheme* (full details of which appear later in this section).

In addition, gift cars and an annual allowance for their upkeep are provided for veterans who, as a result of service, have suffered the amputation of both legs above the knees or amputation of one leg above the knee plus any two other amputations (above the ankle or at or above the wrist) or complete paraplegia resulting in the total loss of the use of both legs. A grant of up to $100 may be made towards the funeral expenses of eligible veterans and certain of their dependants. Payment of up to $10 may be made to provide such necessities as meals, sleeping accommodation, etc., for veterans in need of immediate relief. Also certain concessions in telephone rental charges are provided for some classes of veterans and their dependants, including blinded veterans, war and defence widows and certain service and Special Rate disability pensioners. Veterans who have been blinded as a result of service may be issued with talking book machines. The Australian Red Cross Society supplies 'book' records or cassettes for these machines, free of charge, thus enabling the blinded to enjoy a wide range of literature.

Expenditure in 1974–75 on general Repatriation benefits for all wars was $7,680,000, comprising Soldiers' Children Education Scheme, $3,667,000; recreation transport allowance, $861,000; and other benefits $3,156,000.

Trust (and other) funds administered by the Department of Repatriation held $15,904,800 in securities (face value) and $1,083,935 in cash, a total of $16,988,735 at 30 June 1975.

Reciprocal arrangements with the United Kingdom, New Zealand and other countries provide for the payment of pensions, etc. to eligible Australian veterans living overseas and to eligible veterans from overseas who are living in Australia.

Soldiers' Children Education Scheme

The Soldiers' Children Education Scheme was established in 1921 and operates with the assistance of the voluntary Education Boards in each State. These Boards consist of representatives of government and non-government education authorities and of ex-service and other organisations which have a general interest in the welfare of the children of veterans. The objects of the Scheme are to assist and encourage eligible children in acquiring a standard of education compatible with their aptitude and ability, and to prepare them to enter an agricultural, commercial, professional, or industrial calling of their own choice. Eligible children are children of veterans whose deaths have been accepted as service-related; or of veterans who died from causes not service-related but who were receiving at the date of death a disability pension at a Special Rate for blindness, total and permanent incapacity, pulmonary tuberculosis, or amputation of two or more limbs; or of veterans who, as a result of service, are blinded, totally and permanently incapacitated, or receiving the Special Rate pension for pulmonary tuberculosis and are likely to receive such pension for a period of at least three years. From the commencement of primary education until the child reaches twelve years of age, school requisites and fares are provided. From the commencement of secondary education or from the age of twelve years, whichever is earlier an education allowance is payable while the child is undertaking primary or secondary education. Assistance beyond secondary education is provided where an approved beneficiary continues with a course of specialised education or training necessary for a career. At this stage of training, in addition to the education allowance, fees are paid and text books, essential equipment and other minor benefits are provided.

All education allowances are subject to an allowed income limit test, i.e. the amount of education allowance payable depends on the amount of income a child receives over the allowed limit. The scale of maximum allowances payable to eligible children at various stages of education is as follows.

SOLDIERS' CHILDREN EDUCATION SCHEME
WEEKLY RATES OF ALLOWANCES, FROM 1 JANUARY 1975
($)

Type of training	*Living at home*	*Living away from home*
At school—		
Aged 12 and under 14 years	3.70	12.15
Aged 14 ,, ,, 16 years	5.55	12.15
Aged 16 ,, ,, 18 years	12.15	18.80
Professional (university, etc.)	19.23	30.77
Agricultural	..	6.10
Industrial (apprenticeship, etc.)	4.45	8.80

The following tables show the costs of education under the scheme for the year ended 30 June 1975 and the number of children in receipt of benefit at 30 June 1975.

SOLDIERS' CHILDREN EDUCATION SCHEME: EXPENDITURE, 1974-75

($'000)

	N.S.W.(a)	*Vic.*	*Qld*	*S.A.(b)*	*W.A.*	*Tas.*	*Aust.*
Cost of education of beneficiaries—							
Under 12 years of age	4	4	5	1	1	1	16
12 years of age and over	1,429	942	569	354	199	153	3,646
Total expenditure	**1,433**	**946**	**574**	**355**	**200**	**154**	**(c)3,662**

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Excludes overseas expenditure of $20,000.

SOLDIERS' CHILDREN EDUCATION SCHEME: NUMBER RECEIVING BENEFITS(a) AT 30 JUNE 1975

Type of training	*N.S.W. (b)*	*Vic.*	*Qld*	*S.A. (c)*	*W.A.*	*Tas.*	*Over-seas*	*Total*
At school—								
Aged under 14 years(d)	432	249	203	88	66	75	7	1,120
Aged 14 and under 16 years	581	391	301	123	74	107	6	1,583
Aged 16 and under 18 years	468	364	150	114	62	40	12	1,210
Total at school	*1,481*	*1,004*	*654*	*325*	*202*	*222*	*25*	*3,913*
Professional	532	372	230	145	74	47	9	1,409
Agricultural	..	..	..	2	3	..	..	5
Industrial	..	..	..	..	..	..	..	..
Grand total	**2,013**	**1,376**	**884**	**472**	**279**	**269**	**34**	**5,327**

(a) Refers only to children in receipt of an education allowance. (b) Includes Australian Capital Territory. (c) Includes Northern Territory. (d) From 12 years of age or the commencement of secondary education, whichever is the earlier.

Settlement of returned service personnel on the land

Reference to the settlement of returned service personnel on the land will be found in Chapter 22, Rural Industry.

Re-establishment benefits for former regular and former national servicemen

Subject to prescribed conditions, vocational training and business loans are provided for former regular and former national servicemen, with a view to ensuring that they are not at a disadvantage when they return to civil life. Loans from $5,000 (business and professional) and $10,000 (agricultural) may be granted to veterans in these categories who satisfy prescribed requirements in respect of suitability of their proposed business propositions and adequacy of security. Agricultural loans are administered by the Department of Primary Industry.

The Services Canteens Trust Fund

The Services Canteens Trust Fund was established under the *Services Trust Funds Act* 1947. Its funds are derived from the assets and profits of wartime services canteens, mess and regimental funds of disbanded units, and several other sources.

The total amount transferred to the Fund to 31 December 1975 was $11,058,551. The Act prescribed that, of this, $5 million and such further amounts as the trustees of the Fund might from time to time decide, should be devoted to the provision of education facilities for the children of eligible veterans, and that the balance of the Fund should be used to provide relief for veterans and their dependants in necessitous circumstances.

The Fund is administered by ten honorary trustees appointed by the Governor-General. The trustees have power to determine the persons or groups of persons to benefit from the Fund and the extent of the benefits to be granted within the provisions of the Act, and to appoint regional committees to assist with the administration. Members of regional committees are all persons who served in the 1939–45 War or are widows of men who served during the war. The trustees and members of regional committees serve in an honorary capacity.

Assistance from the Fund

Persons eligible for assistance from the Fund are those who, between 3 September 1939 and 30 June 1947, served in the Australian Naval, Military or Air Forces, including members of the canteens staff of any ship of the Royal Australian Navy, persons duly accredited to any part of the Defence Forces who served in an official capacity on full-time paid duty, and their dependants. The trustees have introduced schemes for providing welfare relief for veterans who are eligible for benefits, and for their dependants; benefits for children of eligible veterans who are suffering from serious and incapacitating afflictions; and education benefits for the children of eligible veterans. From its inauguration in 1947 the Fund is to be available for forty years for both welfare relief and educational benefits.

The total assistance granted under these three schemes from the inception of the Fund to 31 December 1975 was $13,897,840 ($409,403 during 1975) distributed as follows: *Welfare relief*, $4,335,935 ($155,051); *Assistance for afflicted children*, $344,609 ($2,092); and *Educational assistance*, $9,217,296 ($252,260).

For detailed information on the operation of the Fund reference should be made to the annual reports of the Services Canteens Trust Fund.

Ex-service personnel, widows and children

In November 1971, a survey based on the quarterly population survey (*see* Chapter 20, Employment and Unemployment) was conducted at the request of the Department of Repatriation and the Services Canteens Trust Fund. The survey questions were designed to identify four classes of person, namely:

(*a*) those who had served in the Australian armed forces during wartime;

(*b*) those ex-service personnel who had a disability which had been accepted by the Repatriation Department as having been war-caused and those who were in receipt of a war pension;

(*c*) widows of men who had served during wartime;

(*d*) children, under 21 years of age, of ex-service personnel or their widows.

Details of the survey were published in Year Book No. 59, page 112 and the mimeographed bulletin *Ex-service Personnel, Widows and Children*, November 1971 (Reference No. 15.1).

CHAPTER 6

INTERNATIONAL RELATIONS

Australia's international relations have developed as a natural outcome of the country's growth from 19th century colonial status to independent nationhood. Initially, association with Britain and co-operation with the Commonwealth countries were the chief pre-occupations. Later, partly as a consequence of the vital role played in the Pacific by the United States of America in the 1939–45 War and during the Cold War period in ensuring Australian security, close relations were also developed with that country. These links remain important factors in Australian policy.

Increasing importance is being attached to Australia's interests in areas adjacent to Australia—the countries of Asia and the Pacific, as well as the Indian and Pacific Oceans. Australia has a strong interest in the security and development of this area. Special attention is being given to developing Australia's bilateral relationships with China, Japan, Indonesia and Papua New Guinea. Within South East Asia, Australia has particularly good relations with the Association of South-East Asian Nations (ASEAN) group of countries; the relationship is being expanded and developed with this group and with all countries in the Asian/Pacific area.

Australia is willing to develop friendly and co-operative relations with all countries, especially those which share Australia's objectives, and to give full support to international initiatives for the reduction of world tensions. Participation in the Commonwealth of Nations, the United Nations and other multilateral forums is also of significance in Australia's foreign policy. In these bodies and in its bilateral relationships, Australia is working towards the promotion of security and development through co-operation with neighbouring countries and through efforts to reduce tensions generally in the world.

Relations with the Great Powers

Australia has extensive relations with the United States. The alliance is a reflection of the common interests, values and outlook of the two countries. This partnership finds expression in the ANZUS Treaty, signed by Australia, New Zealand and the United States in 1951. Numerous other contacts also exist between Australia and the United States, at both government and private levels. During 1976 Australia is making a significant contribution to the United States' Bicentenary celebrations.

Australia attaches importance to its relationship with the Soviet Union, and is working to develop improved co-operation, particularly in the trade, scientific and cultural fields, in which agreements have been signed between the two countries.

Since the establishment of diplomatic relations with China in 1972, the relationship has steadily taken on increasing substance. Cultural and trade relations have continued to develop and the increased scope for consultation between Governments at embassy level and during visits of senior Government representatives has been valuable.

Relations with Asia and the Pacific

Asia and the Pacific are the areas of Australia's primary interest and concern. This has long been reflected in Australia's active role in regional associations and organisations such as the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) (formerly the Economic Commission for Asia and the Far East), the Colombo Plan, the Asian Development Bank, the South Pacific Forum, the South Pacific Commission, the South Pacific Bureau for Economic Co-operation and in many other commercial and professional bodies, both private and government. This involvement was further developed in 1973, when Australia became an associate member of the South-East Asian Ministers of Education Organisation (SEAMEO) and a full member of the Ministerial Conference for the Economic Development of South-East Asia (MEDSEA).

Australia believes that peace and prosperity in Asia and the Pacific largely depend on the ability of countries in the area to co-operate with one another to secure these objectives; and for major powers, both local and external, to reach a durable accommodation of interests in which their fears and aspirations and the independence of the smaller or less populous countries of the region will be respected.

Australia welcomes the progress achieved by the Association of South-East Asian Nations (ASEAN), which it considers a model of successful regional co-operation. Australia also follows with interest ASEAN initiatives towards contributing to regional peace and stability and welcomes the objective that the ASEAN member countries have set for themselves of a zone of peace, freedom and neutrality in South-East Asia. Australia has entered a program of economic co-operation with ASEAN to which it has pledged $A5 million.

Australia places great value on maintaining and strengthening its cordial and close relations with Indonesia. Relations between the two countries allow for differences of views.

Australia also gives high priority to developing and strengthening its relations with Japan, both bilaterally and in international forums, on a basis of mutual trust and understanding. The two nations have become increasingly interdependent in economic terms: Japan is Australia's biggest trading partner and Australia is a major export market for Japan. Both countries have a common interest in the Asia-Pacific region's economic and political development.

Australia also recognises the importance of its link with the Indian sub-continent, and has taken steps to strengthen its relationship with the countries of the area.

In the Pacific, Australia looks to consolidate and to expand its co-operative activities to promote the stability, welfare, harmony and economic development of the region. Australia was a foundation member of both the South Pacific Commission and of the South Pacific Forum. Matters of common interest are regularly discussed with Australia's Pacific partners.

Papua New Guinea, Australia's nearest neighbour and former territory, attained independence on 16 September 1975. It continues to be given the highest priority in bilateral relations. Australia has pledged a minimum of $A930 million in aid to Papua New Guinea over the five years beginning in 1976.

Australia maintains very close connections, and has a very wide range of common interests with New Zealand. It is intended to develop these.

Relations with Europe

Australia attaches considerable importance to its friendly relations with the European Communities, as well as to its bilateral relations with individual European countries. Co-operation in the cultural, scientific and technical fields is increasing, while membership of the Organisation for Economic Co-operation and Development enables Australia to participate actively in consultation on a wide range of policy issues with countries experiencing similar social and economic circumstances.

Although aspects of the relationship are changing, the ties of kinship that most Australians have with Britain remain strong and continue to be of great importance. There are opportunities in many fields for mutually beneficial co-operation, which will be facilitated by close ties of friendship.

Indian Ocean

Australia is concerned that the Indian Ocean should not become a major area of competition between the superpowers and prefers that their presences there be at the minimum practical level but balanced. Australia therefore supports United States proposals to upgrade a logistic centre at Diego Garcia.

Australia is a member of the United Nations Ad Hoc Committee to study the implications of the Indian Ocean as a zone of peace. Australia supported the UN Resolution on the Indian Ocean in 1975 which, inter alia, invited all States to co-operate in a practical manner with the Committee in the discharge of its functions. Australia remains concerned with questions affecting the future stability of the Indian Ocean area and supports the reduction of tensions there.

Relations with other countries

Australia recognises the need to develop relations with other parts of the world and has increased its diplomatic representation in Africa, the Caribbean, Latin America and the Middle East. Development of relations in these regions reflects several common interests, including the role of middle powers and resources policies.

United Nations

Australia played an active part in drafting the Charter of the United Nations at the Conference on International Organisation in San Francisco in 1945, and has been a consistent supporter of the principles and objectives of the United Nations since its foundation. Besides participating actively in the affairs of the United Nations through the annual debates in the General Assembly, Australia has served on the Security Council (1946–47, 1956–57 and 1973–74), the Economic and Social Council (1948–50, 1953–55, 1962–64 and 1974–76), the Trusteeship Council (1947–75) on the governing bodies of the principal and specialised agencies.

Australia has actively supported decolonisation and besides having been a member of the Trusteeship Council (by virtue of its former administration of Nauru and of New Guinea) is a member of the Special Committee on Decolonisation (the Committee of 24) and of the Council for Namibia.

In 1950, Australia contributed to the United Nations forces in Korea. It has also been directly involved in United Nations peace-keeping activities in Greece (1947), Palestine (1947), Indonesia (1948–49), Kashmir (1947), the Arab States and Israel (1948), Hungary (1956–57) and Cyprus (since 1964). It is a member of the special Committee on Peace-keeping Operations. Australia contributed its share of the costs of the United Nations operations in the Congo and in the Middle East. It also contributed personnel for United Nations observer missions in India/Pakistan and the Middle East, and has made voluntary contributions to the costs of maintaining the United Nations force in Cyprus as well as providing a police contingent for Cyprus.

In the economic, social and cultural sphere, Australia has contributed to the work of the United Nations through membership of the Economic and Social Council. It was a foundation member of one of the four United Nations regional economic commissions now the Economic and Social Commission for Asia and the Pacific, the 4th, 15th and 24th Sessions of which (under its former title of the Economic Commission for Asia and the Far East) were held in Australia.

As a leading agricultural country, Australia played a large part in the establishment of the Food and Agriculture Organisation. The 10th Regional FAO Conference for Asia and the Far East was held in Canberra in August-September 1970. Australia continues to be a member of the International Civil Aviation Organisation, the International Telecommunication Union, the World Meteorological Organisation, the Inter-Governmental Maritime Consultative Organisation, the International Atomic Energy Agency, and Universal Postal Union. It is also a member of the United Nations Development Program, the International Labour Organisation, the World Health Organisation, the United Nations Education, Scientific and Cultural Organisation, and numerous financial and other bodies. Australia became a member of the Governing Council for the United Nations Environment Program for three years from 1973.

Australia has played an active role in the United Nations Conference on the Law of the Sea including the latest session (fourth) of the conference in New York in March/May 1976. At the 29th session of the United Nations General Assembly in 1974 Australia obtained the inscription of an item on diplomatic asylum, and expressed its strong support for an international agreement on the principles which should govern the granting of diplomatic asylum. Australia was represented at a meeting of experts in Geneva in April/May 1975 to review a draft convention on territorial asylum.

Australia has participated in the Diplomatic Conference on the Reaffirmation and Development of Humanitarian Law applicable in Armed Conflicts, sessions of which were held in Geneva in 1974, 1975 and 1976. The Australian and State Governments were represented at the fifth United Nations Congress on Prevention of Crime and Treatment of Offenders in Geneva in September 1975. Australia will be host to the next congress, in 1980.

The Commonwealth

Opportunities to work co-operatively exist in many other multilateral forums among which the Commonwealth of Nations is a distinctive and unique framework bringing together around a quarter of the world's population. Australia participates actively in Commonwealth activities and is host to a meeting of senior Commonwealth officials in 1976.

Treaties

The bilateral and multilateral agreements to which Australia is party are printed in the Australian Treaty Series and in the Department of Foreign Affairs Annual Report. Details may be obtained from the Department of Foreign Affairs, Canberra, A.C.T. 2600.

Australia's Official Development Assistance to Less-Developed Countries

Since 1945, Australia has spent over $2,650 million on aid. In the last decade, official development assistance has more than trebled from $98 million in 1964–65 to $328 million in 1974–75. For 1975–76 it is expected to reach $376 million. This represents an expenditure of about $28 per head of population in Australia.

Australia's aid to less-developed countries was 0.56 per cent of GDP in 1974–75.

The table below shows Australia's official development assistance during the years 1971–72 to 1974–75 and total post-war expenditure to 1974–75.

AUSTRALIA'S OFFICIAL DEVELOPMENT ASSISTANCE TO LESS-DEVELOPED COUNTRIES
($'000)

Scheme	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*Total 1945–46 to 1974–75*
BILATERAL PROGRAMS—					
Aid to Papua New Guinea	136,536	144,302	(*a*)177,076	(*a*)168,835	1,684,741
Colombo Plan	27,202	33,670	(*a*)30,185	(*a*)41,778	(*b*)359,218
Food Aid Convention—International Grain Agreement and International Wool Agreement	11,338	14,262	28,557	31,083	119,890
Emergency Food Aid	. .	2,454	262	. .	36,678
SEATO Aid Program	1,999	1,805	. .	. .	29,484
Indus Water Scheme	2,021	878	207	2,840	23,268
United Nations Special Program . . .	. .	. .	. .	(*a*)23,012	23,012
South Pacific Aid Program	996	1,158	2,318	4,032	10,566
Commonwealth Co-operation in Education Scheme	790	871	1,006	1,141	9,477
Special Aid(*c*)	(*d*)2,401	2,561	779	(*e*)1,979	9,070
Special Commonwealth African Assistance Plan	548	576	1,025	1,430	7,134
Foreign Exchange Operations Fund—Laos .	643	634	638	320	6,495
Refugee Relief	2,300	. .	. .	(*f*)149	3,630
Disaster Relief	50	107	78	400	2,062
Exchange Support Fund—Cambodia . .	420	773	344	. .	1,537
Australian/Asian University Aid and Co-operation Scheme	200	229	262	334	1,258
Australian International Award Scheme (including South East Asian Scholarships) .	47	40	31	97	775
Loan to Fiji for Air Pacific	. .	. .	. .	658	658
Voluntary Aid Associations	. .	. .	. .	232	232
Australian Council for Overseas Aid . .	16	20	20	40	177
Miscellaneous Aid	. .	. .	. .	. .	(*g*)174
Overseas Service Bureau	. .	. .	. .	165	165
South Pacific Cultures—Preservation and Development	. .	. .	. .	50	50
Total bilateral aid	*187,507*	*204,340*	*242,788*	*278,575*	*2,329,751*
MULTILATERAL PROGRAMS—					
FINANCIAL INSTITUTIONS—					
International Development Association .	6,864	5,696	6,870	15,314	70,314
Asian Development Bank	662	2,680	2,822	10,815	40,073
Other	. .	. .	. .	588	50,173
Total	7,526	8,376	9,692	26,717	160,560
Less Repayments by IBRD . . .	. .	396	706	706	1,808
Total Financial Institutions . . .	7,526	7,980	8,986	26,011	158,752

For footnotes *see* end of table

AUSTRALIA'S OFFICAL DEVELOPMENT ASSISTANCE TO LESS-DEVELOPED COUNTRIES—*continued*

($'000)

Scheme	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*Total 1945–46 to 1974–75*
CONTRIBUTIONS TO UN FAMILY—					
United Nations Relief and Rehabilitation Administration	..	..	..	..	(*h*)49,586
United Nations Development Programs(*i*)	1,735	1,781	1,997	2,525	24,804
United Nations International Children's Emergency Fund	550	558	632	779	18,910
United Nations International Children's Emergency Fund—Indo-China(*j*)	..	..	100	400	500
World Food Program(*k*)	1,293	1,217	1,742	2,052	11,811
United Nations High Commissioner for Refugees—Indo-China(*l*)	..	..	..	3,476	3,476
United Nations High Commissioner for Refugees	175	(*m*)290	200	258	3,072
International Refugee Organisation	..	..	..	..	6,594
Other	286	378	1,304	9,034	20,360
Total contributions to UN family	4,039	4,224	5,975	18,524	139,113
CONTRIBUTIONS TO REGULAR BUDGETS OF MULTILATERAL AGENCIES PARTLY ACTIVE IN DEVELOPMENT(*n*)—					
World Health Organisation	469	493	445	543	6,063
United Nations Organisation	148	148	139	177	2,240
United Nations Educational, Scientific and Cultural Organisation	71	71	77	104	1,125
Food and Agricultural Organisation	52	53	53	62	764
International Labour Organisation	52	46	51	55	698
General Agreements on Tariffs and Trade	19	22	23	36	475
Other	8	8	39	74	727
Total contributions to regular budgets, etc.	819	841	827	1,051	12,092
CONTRIBUTIONS TO OTHER AGENCIES—					
South Pacific Commission	331	351	508	692	5,847
Agricultural Research Centres(*o*)	17	295	448	1,121	1,881
Other	280	804	1,225	2,169	5,265
Total to other agencies	628	1,450	2,181	3,982	12,993
Total multilateral aid	*13,012*	*14,495*	*17,969*	*49,568*	*322,950*
Total official development assistance	**200,519**	**218,835**	**260,757**	**328,143**	**2,652,701**

(*a*) Assistance to Papua New Guinea under Colombo Plan and the United Nations Special Program is included with 'Aid to Papua New Guinea'. (*b*) Includes $38,380 from the 1950–51 contributions to United Nations. (*c*) Includes Special Aid to Cambodia, Republic of Vietnam and to Indo-China; also Rehabilitation and Relief Aid for Bangladesh and Emergency Relief to Indo-China. (*d*) Excludes $420,000 contributed to Exchange Support Fund (Cambodia). (*e*) Comprises Emergency Relief for Indo-China and Special Aid under the Colombo Plan to Indo-China. (*f*) Emergency relief for refugees in Cyprus. (*g*) Includes Korean Technical Assistance, Australian Medical Team to Congo, Transport cost of Relief Aid, Contributions to Medical Services in Yemen, Cholera Vaccine to Thailand and other Bilateral Aid. (*h*) Includes Post-United Nations Relief and Rehabilitation Administration Relief. (*i*) Includes United Nations Special Fund and United Nations Expanded Program of Technical Assistance. (*j*) Included under the vote 'Colombo Plan and Special Aid to Indo-China'. (*k*) Includes amounts provided under Food Aid Convention—International Grains Agreement and International Wheat Agreement. (*l*) Includes amounts provided under 'Colombo Plan and Special Aid to Indo-China' and 'Emergency Relief for Indo-China'. (*m*) Includes special contribution of $102,720 for resettlement of Ugandan Asians. (*n*) The development content is calculated by applying to the contribution to each agency the percentage set out in the DAC Statistical Reporting Directives. (*o*) Previously known as International Rice Research Institute.

More than three-fifths of Australia's aid goes to Papua New Guinea. The remainder is channelled through multilateral programs (e.g. the U.N. Agencies and the Asian Development Bank) and through Australia's bilateral programs. The following table sets out the countries which receive bilateral aid.

AUSTRALIA'S BILATERAL AID BY GEOGRAPHICAL REGION AND COUNTRY(*a*)

($'000)

Country	*1973–74*	*1974–75*
ASIA—		
Afghanistan	82	166
Bangladesh	10,598	15,453
Bhutan	114	145
Burma	1,763	2,983
Cambodia	836	378
India	1,358	10,732
Indonesia	21,367	22,866
Korea, Republic of	391	406
Laos	1,399	3,061
Malaysia	2,876	3,858
Nepal	242	349
Pakistan	2,617	4,606
Philippines	1,923	5,114
Singapore	602	662
Sri Lanka	3,067	6,747
Thailand	3,119	4,423
Viet Nam, Democratic Republic of	660	1,990
Viet Nam, Republic of	3,728	5,557
Other	1,757	4,663
Total Asia	*58,499*	*94,159*
OCEANIA—		
British Solomon Islands	171	270
Fiji	2,629	3,418
Gilbert and Ellice Islands	406	180
Papua New Guinea	177,076	168,835
Tonga	452	580
Western Samoa	282	1,949
Other	191	710
Total Oceania	*181,207*	*175,942*
AFRICA—		
Ethiopia	850	411
Ghana	142	185
Kenya	108	451
Mauritius	695	821
Mozambique	..	235
Nigeria	172	170
Somalia	2	515
Sudan	13	684
Tanzania	417	1,803
Uganda	72	101
Zambia	165	390
Other	319	2,350
Total Africa	*2,955*	*8,116*
EUROPE—		
Cyprus	2	153
Other	6	6
Total Europe	*8*	*159*
AMERICA—Total	44	100
UNSPECIFIED—Total	75	99
Total bilateral aid	**242,788**	**278,575**

(*a*) Countries which received more than $100,000 from Australia in 1974–75 are shown separately.

Bilateral aid is channelled through a number of programs, for details *see* Table page 126. Through these programs, Australia assists with a number of developmental projects including the provision of experts and equipment, balance of payment support and training of students.

The following table sets out the numbers of students who have been trained in Australia under the aid programs.

PERSONS FROM LESS-DEVELOPED COUNTRIES FINANCED BY AND TRAINED IN AUSTRALIA

(Number)

Scheme	*Cumulative total at 30 June 1975*	*Total in training at 30 June 1975*	*Number of new awards 1974–75*
Australian/Asian University Aid and Co-operation Scheme	59	22	21
Australian International Awards Scheme(*a*)	162	24	21
Australia Papua New Guinea Education and Training Scheme(*b*)	2,040	206	466
Colombo Plan	15,041	1,775	1,108
Commonwealth Co-operation in Education Scheme	1,637	211	169
Special Commonwealth African Assistance Plan	1,298	84	126
South East Asian Treaty Organisation	86	..	..
South Pacific Aid Program	639	75	123
Total	**20,962**	**2,397**	**2,034**

(*a*) Includes South-East Asian Scholarship Scheme. (*b*) Includes persons trained at International Training Institute (formerly Australian School of Pacific Administration) and also the Commonwealth Practical Training Scheme.

Diplomatic representation

The Department of Foreign Affairs is responsible for advising the Minister for Foreign Affairs and the Commonwealth Government on the conduct of foreign affairs and relations with foreign governments. Its officers staff the Australian diplomatic service and the consular and administrative service.

In January 1976 Australia maintained the following diplomatic and consular missions overseas and full details of these missions are available from the Department of Foreign Affairs, Canberra, A.C.T. 2600.

NOTE. In certain cases the Head of Mission accredited to one country is also accredited to another country. Where this is the case the name of the country in which the Head of Mission is located is shown in brackets. Except where indicated the missions are located in capital cities.

AUSTRALIAN MISSIONS OVERSEAS

Embassies

Afghanistan (*in* Pakistan)
Algeria
Arab Republic of Egypt
Argentina
Austria
Belgium
Bolivia (*in* Brazil)
Brazil
Bulgaria (*in* Yugoslavia)
Burma
Chile
China
Costa Rica (*in* Mexico)
Czechoslovakia (*in* Austria)
Denmark
Equador (*in* Peru)
Ethiopia (*in* Kenya)
Finland (*in* Sweden)
France
German Democratic Republic
Germany, Federal Republic of
Greece
Guatemala (*in* Mexico)
Holy See (*in* Turkey)
Hungary (*in* Austria)
Indonesia
Iran
Iraq (*in* Lebanon)
Ireland
Israel
Italy
Ivory Coast (*in* Ghana)
Japan
Jordan (*in* Lebanon)
Khmer Republic
Republic of Korea
Kuwait (*in* Saudi Arabia)
Laos
Lebanon
Luxembourg (*in* Belgium)
Malagasy Republic (*in* Tanzania)
Maldives (*in* Sri Lanka)
Mexico
Mongolia (*in* Moscow)
Nepal (*in* India)
The Netherlands
Norway (*in* Sweden)
Pakistan
Panama (*in* Mexico)
Paraguay (*in* Argentina)
Peru
The Philippines
Poland
Portugal
Romania (*in* Yugoslavia)
Saudi Arabia
Senegal (*in* Ghana)
South Africa, Republic of
Spain
Sudan (*in* Arab Republic of Egypt)
Sweden
Switzerland
Syria (*in* Lebanon)
Thailand
Turkey, Republic of
Union of Soviet Socialist Republics
United Arab Emirates (*in* Saudi Arabia)
United States of America
Uruguay (*in* Argentina)
Venezuela (*in* Peru)
Viet Nam, Democratic Republic of
Yugoslavia

High Commissions

Bangladesh
Bahamas (*in* Jamaica)
Barbados (*in* Jamaica)
Botswana (*in* South Africa)
Britain
Canada
Cyprus (*in* Greece)
Fiji
Ghana
Granada (*in* Jamaica)
Guyana (*in* Jamaica)
India
Jamaica
Kenya
Lesotho (*in* South Africa)
Malaysia
Malta
Mauritius (*in* Tanzania)
Nauru
New Zealand
Nigeria
Northern Ireland (*in* Britain)
Papua New Guinea
Singapore
Sri Lanka
Swaziland (*in* South Africa)
Tanzania
Tonga (*in* Fiji)
Trinidad and Tobago (*in* Jamaica)
Uganda (*in* Kenya)
Western Samoa (*in* Fiji)
Zambia (*in* Tanzania)

Commissions

Hong Kong
Solomon Islands

Other

Mission to—European Atomic Energy Community (Brussels); European Coal and Steel Community (Brussels); European Communities (Brussels); United Nations (New York); United Nations (Geneva); United Nations Educational, Scientific and Cultural Organisation (Paris); Organisation for Economic Co-operation and Development (Paris).

Consulate-General in—Los Angeles; New York; San Francisco; Chicago; Berlin; Hamburg; Osaka; Milan; Bombay; Calcutta; Karachi; Bahrain; Sao Paulo.

Consulate in—Geneva; Lae; Noumea; Capetown; Honolulu; Rio de Janeiro.

Specialist officers of the Department of Overseas Trade, other Australian Government Departments and the Defence Services stationed abroad are attached to Australian diplomatic or consular missions. Senior attached officers are in some cases accredited to the missions with diplomatic or consular ranks approved by the Minister for Foreign Affairs. In addition, the Department of Overseas Trade maintains Trade Commissioner posts which engage in trade promotion in a number of cities where Australia does not have diplomatic or consular representation (*see* page 131).

The Department of Immigration and Ethnic Affairs similarly maintains offices overseas which engage in selection of migrants.

Agents-General for States

From early times the Australian colonies maintained agents in London to encourage immigration and to carry out commercial and financial negotiations. Since Federation the States have continued to maintain Agents-General in London, all of whom work in close co-operation with the High Commissioner for Australia at Australia House, London. Some of the States also maintain other offices overseas, e.g. New South Wales has offices in New York, Tokyo and Wiesbaden.

Diplomatic representation to Australia

The following list shows the diplomatic missions to Australia. Full details of Commonwealth and foreign representation in Australia are available from the Department of Foreign Affairs, Canberra. Consular representatives are not included and particulars of these are available from the Department of Foreign Affairs, Canberra. There are about 300 such representatives in Australia, and sixty countries are represented.

DIPLOMATIC REPRESENTATION TO AUSTRALIA

Embassies

Afghanistan (*in* Japan)
Arab Republic of Egypt
Argentina
Austria
Belgium
Brazil
Bulgaria (*in* Indonesia)
Burma
Chile
China
Czechoslovakia (*in* Indonesia)
Denmark
Finland
France
German Democratic Republic
Germany, Federal Republic of
Greece
Guatemala (*in* Japan)
Holy See
Hungary (*in* Indonesia)
Indonesia
Iran
Iraq (*in* Japan)
Ireland
Israel
Italy
Japan
Jordan (*in* Japan)
Korea, Republic of
Kuwait (*in* Japan)
Laos
Lebanon
Mexico
Mongolia (*in* Japan)
Nepal (*in* Japan)
The Netherlands
Norway
Pakistan
Peru
The Philippines
Poland
Portugal
Romania
Senegal (*in* India)
South Africa, Republic of
Spain
Sweden
Switzerland
Thailand
Turkey, Republic of
Union of Soviet Socialist Republics
United States of America
Uruguay
Viet Nam, Democratic Republic of
Yugoslavia, Socialist Federal Republic of

High Commissions

Bangladesh
Britain
Canada
Fiji
Ghana
India
Malaysia
Malta
New Zealand
Nigeria
Papua New Guinea
Singapore
Sri Lanka

Overseas trade representation

The Australian Trade Commissioner Service, January 1977

The Department of Overseas Trade maintains Trade Commissioners at fifty-seven posts in forty-five countries. Forty-five editions of the Department of Overseas Trade's promotion periodical *Australian Trading News* now circulate in more than 100 countries in fifteen languages. (*See also* Australian Trade Missions in the chapter Overseas Transactions.)

The countries where Australian Trade Commissioner posts are located are shown in the following list. Except where indicated the missions are located in capital cities only.

Argentina
Austria
Bahrain
Belgium
Brazil (Sao Paulo)
Britain (London, Manchester)
Canada (Vancouver, Ottawa, Toronto)
China
Egypt, Arab Republic of
Fiji
France
German Democratic Republic
Germany, Federal Republic of (Bonn, Hamburg)
Greece
Hong Kong
India
Indonesia
Iran
Iraq
Israel
Italy (Rome, Milan)
Japan (Tokyo, Osaka)
Kenya
Korea, Republic of
Malaysia
Mexico
The Netherlands
New Zealand (Wellington, Auckland, Christchurch)
Nigeria
Pakistan
Papua New Guinea
Peru
The Philippines
Poland
Saudi Arabia
Singapore
South Africa, Republic of (Johannesburg)
Spain
Sweden
Switzerland (Geneva, Berne)
Thailand
Trinidad
United States of America (Washington, D.C., Chicago, New York, San Francisco)
U.S.S.R.
Yugoslavia

Full details of the Australian Trade Commissioner posts are available from the Department of Overseas Trade, Canberra, A.C.T.

Australian Trade Correspondents and Marketing Officers

Detached Australian Trade Correspondents and Marketing Officers supplement the work of the Trade Commissioner in whose Territory they are located. Correspondents are located in Addis Ababa, Ethiopia; Algiers, Algeria; Istanbul, Turkey; Kota Kinabalu, Sabah; Port Louis, Mauritius; Marketing Officers are located in Bombay and Calcutta, India; Columbo, Sri Lanka; Copenhagen, Denmark; Dacca, Bangladesh; Dublin, Ireland; Honolulu, U.S.A.; Noumea, New Caledonia; Rangoon, Burma; Rio de Janeiro, Brazil; Santiago, Chile; and Valletta, Malta.

Trade Commissioners of overseas governments in Australia

The Trade Representatives of overseas governments in Australia are shown in the following list. Full details of Trade Representatives in Australia are available from the Department of Foreign Affairs, Canberra, A.C.T.

Austria (Sydney)
Belgium (Sydney, Melbourne, Perth)
Britain (Canberra, Sydney, Melbourne, Brisbane, Adelaide, Perth)
Bulgaria (Sydney)
Canada (Sydney, Melbourne)
China (Canberra)
Czechoslovakia (Sydney)
Denmark (Sydney)
Finland (Sydney)
France (Sydney, Melbourne)
German Democratic Republic (Sydney)
Greece (Sydney)
Hungary (Sydney)
Israel (Sydney)
Italy (Sydney, Canberra, Melbourne)
Indonesia (Sydney, Canberra)
Japan (Canberra)
Malaysia (Sydney)
Mexico (Sydney)
New Zealand (Sydney, Melbourne, Canberra, Brisbane, Perth)
Norway (Canberra)
Pakistan (Sydney)
Peru (Canberra)
Philippines (Sydney, Melbourne)
Poland (Sydney)
Romania (Sydney)
Singapore (Sydney)
South Africa, Rep. of (Melbourne)
Spain (Sydney)
Sri Lanka (Sydney)
Sweden (Sydney, Melbourne)
United States of America (Sydney, Melbourne)
U.S.S.R. (Canberra)

CHAPTER 7

POPULATION

This chapter includes statistics of the distribution, growth and structure of the population and statistics of the numbers and characteristics of overseas arrivals and departures. More detailed figures will be found in the bulletin *Demography* (4.9), and *Overseas Arrivals and Departures* (4.1 and 4.23), and current statistics are published in the *Monthly Review of Business Statistics* (1.4), *Population and Vital Statistics (Preliminary)* (4.16), *Summary of Vital and Population Statistics* (4.11) and *Overseas Arrivals and Departures* (4.3). The final detailed results of each population census are published in a series of volumes and parts (for list *see Publications of the Australian Bureau of Statistics*, (1.8)).

With the proclamation of the *Constitution Alteration (Aboriginals)* 1967 on 10 August 1967 the provision in Section 127 of the Constitution, requiring the exclusion of Aborigines in reckoning the numbers of the people of the Commonwealth or of a State or other part of the Commonwealth, was repealed. Accordingly, population statistics for all dates subsequent to 10 August 1967 no longer exclude full-blood Aborigines. Estimates for earlier periods back to 30 June 1961 have also been revised to include these Aborigines.

Particulars of the Aboriginal population are given on pages 152–3 in this chapter.

Types of population statistics

Statistics of the population and its characteristics for Australia or the component States and Territories or other constituent areas at specific dates are of four main types:

(i) *Those ascertained by census enumeration*. The population censuses result in comprehensive statistics of characteristics of the population, such as age, sex and birthplace.

(ii) *Those ascertained by 'population counts'*. From time to time in specific areas there are additional enumerations of the population, which are known as population counts, because normally very little information other than the number of persons and their sex is obtained.

(iii) *Current estimates of number, sex and age*. Estimates are prepared for dates subsequent to a census, taking account of natural increase and net migration since the last census.

(iv) *Projections of the population*. Projections of the population and its age/sex structure are prepared from time to time, based on current estimates of population by age and sex and on assumptions about future trends in mortality, fertility and net migration.

The census

In Year Book No. 53, a special article was included outlining the history, purposes, legal basis, organisation, and publication of results of population censuses in Australia (*see* pages 164–70 of that issue).

Early 'musters'

Although regular censuses were not instituted in the several colonies until the years specified in the table below, population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the new settlement at Sydney Cove was formed, and in 1803 the first 'muster' of convicts in Van Diemen's Land (now Tasmania) was conducted.

Development of the census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (now Queensland) but not Van Diemen's Land (Tasmania). Particulars were asked concerning the names, ages and civil conditions of the inhabitants. The next census was taken in 1833, and was followed by another in 1836, when arrangements were made for the enumeration of the population of the newly-established settlement at Port Phillip (Victoria). The first censuses taken in Tasmania, Victoria and Queensland as separate colonies were in 1841, 1854 and 1861 respectively. The first regular census in South Australia was taken in 1844 and in Western Australia in 1848. The 1881 census was the first simultaneous census taken in Australia and formed part of the first simultaneous census of the British Empire.

The following table shows the total population recorded at each census conducted prior to 1891.

POPULATION(*a*), CENSUSES IN AUSTRALIA, 1828 TO 1886

Date	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1828– November	36,598	..	..	..	..	..	..	..	..
1833– 2 September	60,794	..	..	..	..	..	..	..	..
1836– 2 September	77,096	..	..	..	..	..	..	..	..
1841– 2 March	130,856	..	..	..	..	..	..	..	..
31 December	..	..	..	..	..	51,450	..	..	..
1844–26 February	..	..	..	17,366	..	..	..	..	..
1846–26 February	..	..	..	22,390	..	..	..	..	..
2 March	189,609	..	..	..	..	..	..	..	..
1847–31 December	..	..	..	..	..	67,313	..	..	..
1848–10 October	..	..	..	..	4,622	..	..	..	..
1851– 1 January	..	..	..	63,700	..	..	..	..	..
1 March	268,344	..	..	..	..	70,130	..	..	..
1854–26 April	..	(*b*)234,298	..	..	..	..	..	..	..
30 September	..	..	..	..	11,743	..	..	..	..
1855–31 March	..	..	..	85,821	..	..	..	..	..
1856– 1 March	269,722	..	..	..	..	..	..	..	..
1857–29 March	..	408,998	..	..	..	..	..	..	..
31 March	..	..	..	..	..	81,492	..	..	..
1859–31 December	..	..	..	..	14,837	..	..	..	..
1861– 7 April	350,860	538,628	(*b*)30,059	126,830	..	89,977	..	..	..
1864– 1 January	..	..	61,467	..	..	..	..	..	..
1866–26 March	..	..	..	163,452	..	..	..	..	..
1868– 2 March	..	..	99,901	..	..	..	..	..	..
1870– 7 February	..	..	..	..	..	99,328	..	..	..
31 March	..	..	..	..	24,785	..	..	..	..
1871– 2 April	502,998	730,198	..	185,626	..	..	..	..	..
1 September	..	..	120,104	..	..	..	..	..	..
1876–26 March	..	..	..	213,271	..	..	..	..	..
1 May	..	..	173,283	..	..	..	..	..	..
1881– 3 April	749,825	861,566	213,525	276,414	29,708	115,705	(*c*)3,451	..	2,250,194
1886– 1 May	..	..	322,853	..	..	..	..	..	..

(*a*) Excludes full-blood Aborigines. (*b*) Previously included with New South Wales. (*c*) Included with South Australia for the censuses of 1866, 1871 and 1876. Actually Northern Territory was not transferred to the Commonwealth until 1 January 1911.

Australia-wide censuses

State and Territory populations recorded at the Australia-wide censuses taken over the period 1881 to 1971 are shown in the following table. The figures relate to the political boundaries of the several States (or Colonies) and Territories as they existed at the date of each census, except that the Northern Territory has been shown separately from South Australia for the censuses prior to its transfer from that State. The years of formation of the separate Colonies and transfer of the Territories are shown in the chapter Discovery, Colonisation and Federation of Australia (page 6).

At censuses up to 1966, in conformity with Section 127 of the Constitution, Aborigines were excluded from the published population. In 1967 the Constitution was altered to remove this provision, and the 1971 Census therefore includes Aborigines. In order to provide comparability between recent censuses, the 1961 and 1966 population in the following tables has been amended to include Aborigines.

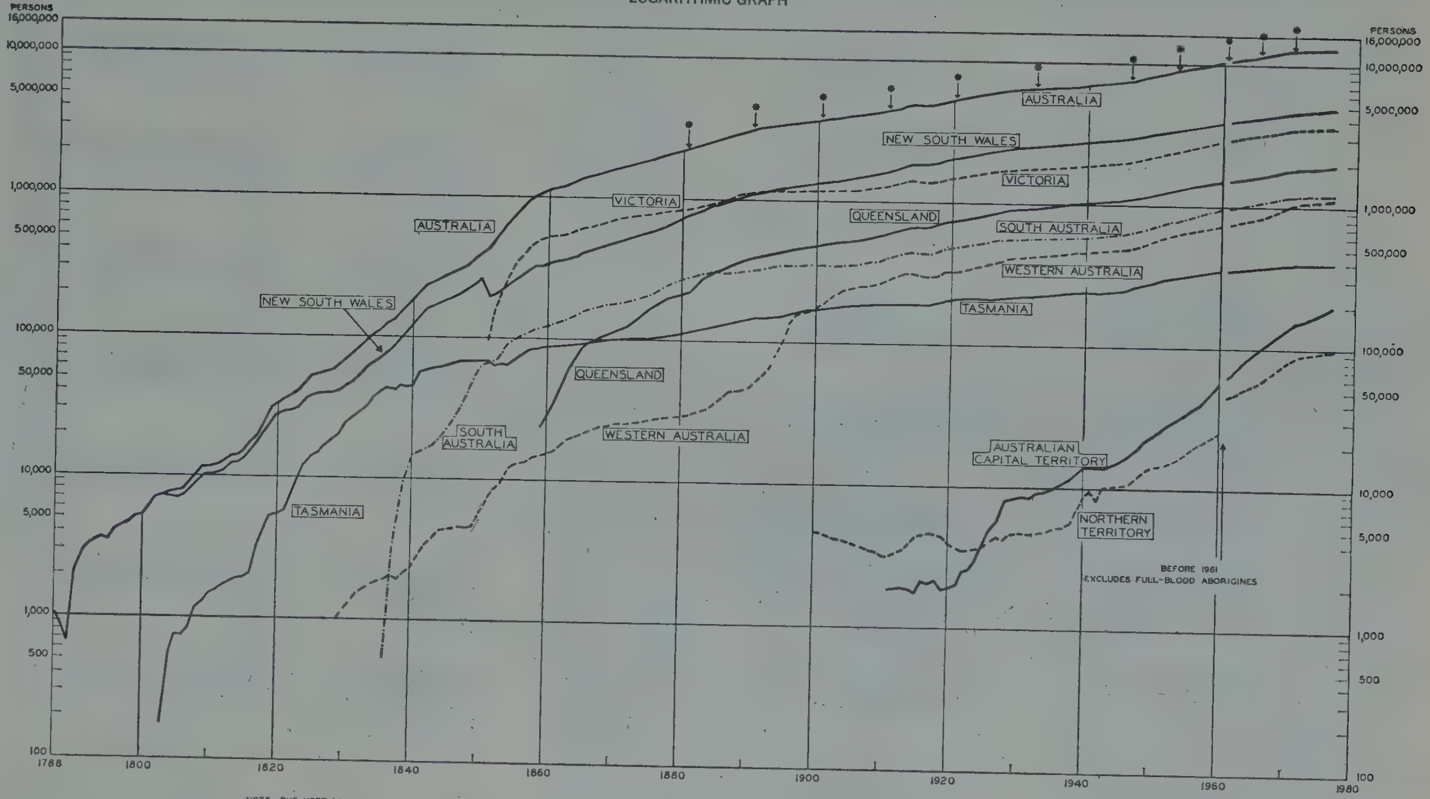
POPULATION, BY SEX: AUSTRALIAN CENSUSES, 1881 TO 1971

Census	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(a)*	*Aust.*
				MALES					
3 April 1881	410,211	451,623	125,325	146,183	17,062	61,162	3,347	..	1,214,913
5 April 1891	609,666	598,222	223,779	162,241	29,807	77,560	4,560	..	1,705,835
31 March 1901	710,005	603,720	277,003	180,485	112,875	89,624	4,216	..	1,977,928
3 April 1911	857,698	655,591	329,506	207,358	161,565	97,591	2,734	992	2,313,035
4 April 1921	1,071,501	754,724	398,969	248,267	177,278	107,743	2,821	1,567	2,762,870
30 June 1933	1,318,471	903,244	497,217	290,962	233,937	115,097	3,378	4,805	3,367,111
30 June 1947	1,492,211	1,013,867	567,471	320,031	258,076	129,244	7,378	9,092	3,797,370
30 June 1954	1,720,860	1,231,099	676,252	403,903	330,358	157,129	10,288	16,229	4,546,118
30 June 1961(*b*)	1,973,700	1,474,536	779,265	491,406	380,740	177,628	25,046	30,858	5,333,179
30 June 1966(*b*)	2,126,652	1,614,240	849,390	550,196	432,569	187,391	31,159	49,991	5,841,588
30 June 1971(*b*)	2,307,210	1,750,061	921,665	586,051	529,066	196,442	48,627	73,589	6,412,711

For footnotes *see* end of table.

POPULATION OF AUSTRALIA, 1788 TO 1975

LOGARITHMIC GRAPH



NOTE. THE VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY THE SCALE

*AUSTRALIAN CENSUS

PLATE 26

POPULATION, BY SEX: AUSTRALIAN CENSUSES, 1881 TO 1971—*continued*

FEMALES

Census	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(a)*	*Aust.*
3 April 1881	339,614	409,943	88,200	130,231	12,646	54,543	104	..	1,035,281
5 April 1891	517,471	541,866	169,939	153,292	19,975	69,107	338	..	1,471,988
31 March 1901	644,841	597,350	221,126	177,861	71,249	82,851	595	..	1,795,873
3 April 1911	789,036	659,960	276,307	201,200	120,549	93,620	576	722	2,141,970
4 April 1921	1,028,870	776,556	357,003	246,893	155,454	106,037	1,046	1,005	2,672,864
30 June 1933	1,282,376	917,017	450,317	289,987	204,915	112,502	1,472	4,142	3,262,728
30 June 1947	1,492,627	1,040,834	538,944	326,042	244,404	127,834	3,490	7,813	3,781,988
30 June 1954	1,702,669	1,221,242	642,007	393,191	309,413	151,623	6,181	14,086	4,440,412
30 June 1961(*b*)	1,944,801	1,455,830	748,249	480,081	366,010	172,712	19,435	27,970	5,215,088
30 June 1966(*b*)	2,111,249	1,605,977	824,934	544,788	415,531	184,045	25,345	46,041	5,757,910
30 June 1971(*b*)	2,293,970	1,752,290	905,400	587,656	501,403	193,971	37,763	70,474	6,342,927

PERSONS

Census	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.(a)*	*Aust.*
3 April 1881	749,825	861,566	213,525	276,414	29,708	115,705	3,451	..	2,250,194
5 April 1891	1,127,137	1,140,088	393,718	315,533	49,782	146,667	4,898	..	3,177,823
31 March 1901	1,354,846	1,201,070	498,129	358,346	184,124	172,475	4,811	..	3,773,801
3 April 1911	1,646,734	1,315,551	605,813	408,558	282,114	191,211	3,310	1,714	4,455,005
4 April 1921	2,100,371	1,531,280	755,972	495,160	332,732	213,780	3,867	2,572	5,435,734
30 June 1933	2,600,847	1,820,261	947,534	580,949	438,852	227,599	4,850	8,947	6,629,839
30 June 1947	2,984,838	2,054,701	1,106,415	646,073	502,480	257,078	10,868	16,905	7,579,358
30 June 1954	3,423,529	2,452,341	1,318,259	797,094	639,771	308,752	16,469	30,315	8,986,530
30 June 1961(*b*)	3,918,501	2,930,366	1,527,514	971,487	746,750	350,340	44,481	58,828	10,548,267
30 June 1966(*b*)	4,237,901	3,220,217	1,674,324	1,094,984	848,100	371,436	56,504	96,032	11,599,498
30 June 1971(*b*)	4,601,180	3,502,351	1,827,065	1,173,707	1,030,469	390,413	86,390	144,063	12,755,638

(*a*) Part of New South Wales before 1911. (*b*) Includes Aborigines.

Increase since 1901 census

POPULATION: INTERCENSAL INCREASES, 1901 TO 1971

NUMERICAL INCREASE

State or Territory	*1901–1911 (10 years)*	*1911–1921 (10 years)*	*1921–1933 (12¼ years)*	*1933–1947 (14 years)*	*1947–1954 (7 years)*	*1954–1961 (7 years)*	*1961–1966 (a) (5 years)*	*1966–1971 (a) (5 years)*
N.S.W.(*b*)	293,602	453,637	500,476	383,991	438,691	493,484	319,400	363,279
Vic.	114,481	215,729	288,981	234,440	397,640	477,772	289,851	282,134
Qld	107,684	150,159	191,562	158,881	211,844	200,569	146,810	152,741
S.A.	50,212	86,602	85,789	65,124	151,021	172,246	123,497	78,723
W.A.	97,990	50,618	106,120	63,628	137,291	96,858	101,350	182,369
Tas.	18,736	22,569	13,819	29,479	51,674	41,588	21,096	18,977
N.T.	−1,501	557	983	6,018	5,601	10,626	12,023	29,886
A.C.T.(*c*)	..	858	6,375	7,958	13,410	28,513	37,204	48,031
Australia	**681,204**	**980,729**	**1,194,105**	**949,519**	**1,407,172**	**1,521,656**	**1,051,231**	**1,156,140**

AVERAGE ANNUAL RATE OF INCREASE—PER CENT

State or Territory	*1901–1911 (10 years)*	*1911–1921 (10 years)*	*1921–1933 (12¼ years)*	*1933–1947 (14 years)*	*1947–1954 (7 years)*	*1954–1961 (7 years)*	*1961–1966 (a) (5 years)*	*1966–1971 (a) (5 years)*
N.S.W.(*b*)	1.97	2.46	1.76	0.99	1.98	1.94	1.58	1.66
Vic.	0.91	1.53	1.42	0.87	2.56	2.58	1.90	1.69
Qld	1.98	2.24	1.86	1.11	2.53	2.04	1.85	1.76
S.A.	1.32	1.94	1.31	0.76	3.05	2.83	2.42	1.40
W.A.	4.36	1.66	2.29	0.97	3.51	2.03	2.58	3.97
Tas.	1.04	1.12	0.51	0.87	2.65	1.82	1.18	1.00
N.T.	−3.67	1.57	1.87	5.93	6.12	7.37	4.90	8.86
A.C.T.(*c*)	..	4.14	10.71	4.65	8.70	9.93	10.30	8.45
Australia	**1.67**	**2.01**	**1.63**	**0.96**	**2.46**	**2.26**	**1.92**	**1.92**

(*a*) Includes Aborigines. (*b*) Includes Australian Capital Territory before 1911. (*c*) Part of New South Wales before 1911.

Minus sign (—) denotes decrease.

Population estimates

The estimated population for Australia as a whole takes account of natural increase and net overseas migration since the latest census. The population in each State and Territory is estimated by adding to the population ascertained at the census the recorded natural increase and the net gain from overseas migration for that State or Territory; gains and corresponding losses that result from movements between States and Territories are also taken into account in so far as they are recorded as transfers of residence under child endowment procedures or Federal electoral procedures or are indicated by the results of any special count. As records of migration by State or Territory are not complete, the estimated State and Territory populations so derived are approximate.

Estimates carried forward in this way eventually reach the point when another census is taken, and the numbers so ascertained supersede those resulting from the estimates. In the light of the census results the estimates for the newly completed intercensal period are revised to adjust for the differences between the new census result and the population at the census date estimated on the basis of the previous census. This is to bring intercensal estimates into line with the two census results and thus effect adjustment for unrecorded or inaccurately recorded movement of population in the intercensal period. Such a revision is made when the preliminary (field count) results of a census become available. Further revision may be necessary when the final results of a census become available. The final results of the Census of Population and Housing of 30 June 1971 have been taken into account in the population estimates for dates subsequent to the Census of 30 June 1966.

Final revised estimates become the permanent population estimates. A mean population for twelve month periods is calculated by the method described on page 141. As populations at specific dates are used in these calculations, consequential revisions are made to mean populations when estimates for specific dates are revised as described above.

The method used for estimating State and Territory populations, as described above, is different from that used prior to June 1961 (for particulars *see* Year Book No. 52, page 191). Population estimates subsequent to the 1961 Census are based on a method which excludes holiday, business or other similar short-term movements between States and Territories since the census. As a consequence, marked quarterly seasonal movements in some States due to interstate holiday movements are reflected in population figures prior to 1961 but not for subsequent years. This has some effect on the continuity of the series of mean population figures and should be borne in mind when making calculations which use mean populations as a basis (*see* page 141). Since June 1961 such movements affect the estimates only in so far as people who were on holiday or other short-term interstate travel at the time of the Census are counted in the population of the State or Territory where they spent Census night. However, there are seasonal features in the movement of the populations of States and Territories due to movements of visitors from overseas and of Australians travelling overseas for holiday, business or other similar short-term periods.

Growth of population

ESTIMATED POPULATION(*a*): DECEMBER, 1950 TO 1975

31 Dec.	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
					MALES				
1950	1,627,618	1,114,497	620,329	364,705	294,758	147,103	9,414	13,021	4,191,445
1955	1,774,382	1,281,891	696,544	423,042	343,838	165,356	11,149	17,615	4,713,817
1960	1,951,907	1,453,815	766,448	483,802	372,665	180,511	14,785	29,140	5,253,073
1965	2,112.610	1,602,058	841,926	544,257	427,330	186,483	30,632	48,333	5,793,629
1970	2,292,534	1,739,916	914,631	584,357	520,174	196,363	46,561	70,341	6.364,877
1971	2,330,339	1,766,582	933,944	591,668	537,781	197,444	49,525	77,113	6,484.396
1972	2,351,748	1,787,949	956,480	596,101	544,918	198,461	51,019	83,578	6,570,254
1973	2,370,619	1,804,333	980,420	603,182	554,342	199.849	53,172	89,740	6,655 657
1974	2,401,799	1,832,171	1,004,856	617,659	570,285	202,509	(*b*)40,393	95,060	6,764,732
1975	2,407,501	1,840,408	1,013,124	618,223	579,870	204,482	51,930	102,282	6,817,820

(*a*) *See* footnote at end of table.

ESTIMATED POPULATION(a): DECEMBER, 1950 TO 1975—*continued*

31 Dec.	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
					FEMALES				
1950 .	1,613,439	1,122,685	585,089	358,138	277,891	143,230	5,006	10,558	4,116 036
1955 .	1,752,152	1,264,441	662,314	411,619	324,771	159,563	6,803	16,345	4,598,008
1960 .	1,925,354	1,434,475	735,838	473,220	358,368	175,458	10,002	26,132	5,138,847
1965 .	2,098,439	1,593,802	817,497	538,701	410.918	183,125	24,832	44,465	5,711,779
1970 .	2,281,201	1,742,115	898,153	585,873	493,878	193,890	36,261	67,221	6,298,592
1971 .	2,321,149	1,770,953	918.376	593,827	511,116	195,380	39,369	73,675	6,423,845
1972 .	2,345,483	1,793,068	942,152	600,440	520,845	197,091	42,336	79,627	6,521,042
1973 .	2,367,498	1,811,487	966,100	607,952	530,057	199,246	44,913	85,652	6,612 905
1974 .	2,401,352	1,837,256	988,896	621,405	548,065	202,472	(b)29,583	91,266	6,720,295
1975 .	2,411,612	1,846,337	999,233	621,140	557,514	204,451	43,929	98,888	6,783,104
					PERSONS				
1950 .	3,241,057	2,237,182	1,205,418	722,843	572,649	290,333	14,420	23,579	8,307,481
1955 .	3,526,534	2,546,332	1,358,858	834,661	668,609	324,919	17,952	33,960	9,311,825
1960 .	3,877,261	2,888,290	1,502,286	957,022	731,033	355,969	24,787	55,272	10,391,920
1965 .	4,211,049	3,195,860	1,659,423	1,082,958	838,248	369,608	55,464	92,798	11,505,408
1970 .	4,573,735	3,482,031	1,812,784	1,170,230	1,014,052	390,253	82,822	137,562	12,663,469
1971 .	4,651,488	3,537,535	1,852,320	1,185,495	1,048,897	392,824	88,894	150,788	12,908,241
1972 .	4,697,231	3,581,017	1,898,632	1,196,541	1,065,763	395,552	93,355	163,205	13,091,296
1973 .	4,738,117	3,615,820	1,946,520	1,211,134	1,084,399	399,095	98,085	175,392	13,268,562
1974 .	4,803,151	3,669,427	1,993,752	1,239,064	1,118,350	404,981	(b)69,976	186,326	13,485,027
1975 .	4,819,113	3,686,745	2,012,357	1,239,363	1,137,384	408,933	95,859	201,170	13,600,924

(a) Excludes full-blood Aborigines before 1961. The final results of the Census of 30 June 1971 have been taken into account in the preparation of estimates for dates after the Census of 30 June 1966. *See* text page 137. (b) Decrease due to effect of cyclone 'Tracy' on Darwin population.

The estimated population at 31 December each year from 1788 to 1946 is shown in *Demography*, Bulletin No. 67, 1949, and for the period 1901–1971 in *Demography*, Bulletin No. 87 (*see also* Statistical Summary in this Year Book). A graph illustrating the growth of the population of Australia and of each State and Territory appears on plate 26, page 135.

Proportions of area and of population, density and masculinity

PROPORTIONS OF AREA AND OF POPULATION: DENSITY AND MASCULINITY OF POPULATION: 31 DECEMBER 1975

State or Territory	*Proportion of total area per cent*	*Proportion of population, 31 December 1975 (per cent)*			*Density(a)*	*Masculinity(b)*
		Males	*Females*	*Persons*		
New South Wales	10.43	35.31	35.55	35.43	6.01	99.83
Victoria.	2.96	26.99	27.22	27.11	16.20	99.68
Queensland	22.48	14.86	14.73	14.80	1.17	101.39
South Australia	12.81	9.07	9.16	9.11	1.26	99.53
Western Australia	32.87	8.51	8.22	8.36	0.45	104.01
Tasmania	0.88	3.00	3.01	3.01	6.03	100.02
Northern Territory	17.52	0.76	0.65	0.70	0.07	118.21
Australian Capital Territory . .	0.03	1.48	1.46	1.48	83.82	103.43
Australia	**100.00**	**100.00**	**100.00**	**100.00**	**1.77**	**100.51**

(a) Number of persons per square kilometre. (b) Number of males per 100 females.

NOTE. Additional information about density and masculinity appears later in this chapter.

Elements of increase

The 'total increase' of the population is obtained by combining 'natural increase', i.e. the excess of births over deaths, with 'net migration', i.e. the excess of arrivals over departures. Comparison of the total increase so obtained with that derived by subtracting the population recorded at one census from that recorded at the next census reveals differences which are attributable partly to differences in the coverage of the census enumerations, and partly to deficiencies in the records of the elements of increase.

In the following table figures for increase in total population include, in addition to the recorded natural increase and net overseas migration gain, adjustments to make the series of increases agree with total intercensal increases revealed by successive censuses (up to the Census of 30 June 1971). The adjustment reflects the combined net error in the recording of births, deaths and migration during the five year period and in the census enumerations.

POPULATION: ELEMENTS OF INCREASE, AUSTRALIA, 1951 TO 1975

Period	*Natural increase (a)*	*Net overseas migration gain(b)*	*Increase in total population(c)*		
			Males	*Females*	*Persons*
1951–55	599,702	413,824	522,372	481,972	1,004,344
1956–60	679,857	405,022	539,256	540,839	1,080,095
1961–65	690,294	399,888	519,623	553,784	1,073,407
1966–70	665,310	543,808	571,248	586,813	1,158,061
1971–75	711,135	231,865	452,945	484,510	937,455
1971	165,712	84,605	119,519	125,253	244,772
1972	155,209	27,846	85,859	97,196	183,055
1973	136,848	40,418	85,403	91,863	177,266
1974	129,344	87,121	109,075	107,390	216,465
1975	124,022	−8,125	53,089	62,808	115,897

(*a*) Excess of births registered over deaths registered. Excludes full-blood Aborigines before 1961. (*b*) Excess of recorded overseas arrivals over recorded overseas departures. Minus sign (−) denotes excess of departures over arrivals. (*c*) Includes adjustments to make the series of recorded annual increases agree with the total intercensal increases revealed by successive census results. Excludes full-blood Aborigines before 1961.

Rate of population growth

In the following two tables natural increase refers to the excess of births over deaths, net migration refers to excess of overseas arrivals over departures (excluding overseas movement of defence personnel for the period September 1939 to June 1947) and total increase is the sum of natural increase and net migration together with adjustments to make the series of increases agree with total intercensal increases revealed by successive census results (up to the Census of 30 June 1971).

Average annual rates of population growth for periods greater than one year are calculated on the compound interest principle. If P_0 and P_t are populations at the beginning and end of a t-year period, and r is a rate, then $P_t = P_0(1 + r)^t$. The average annual percentage rate of population growth is thus

$$100\left(\sqrt[t]{\frac{P_t}{P_0}}-1\right)$$

The average annual rate of growth is sometimes split into percentage growth components arising from natural increase and net migration. This is done by multiplying the rate of growth by the proportion of natural increase or net migration to total population increase for the period. Differences between the sum of the rates of natural increase and of net migration and the rate of total increase are due to the intercensal adjustment.

Rates of natural increase and net migration are more conventionally shown as rates per 1,000 of mean population. Figures prepared on this basis are shown in the table on page 141. Crude birth and death rates, also calculated as rates per 1,000 of mean population, are shown in Chapter 8 (*see* pages 181 and 192).

POPULATION: ANNUAL RATE OF GROWTH, AUSTRALIA 1951 TO 1975

(Per cent)

Period	Natural increase(a)	Net migration	Total increase(a)
Average annual rate—			
1951–55	1.38	0.95	2.31
1956–60	1.40	0.83	2.22
1961–65	1.27	0.74	1.98
1966–70	1.11	0.91	1.94
1971–75	1.12	0.36	1.48
Annual rate—			
1971	1.31	0.67	1.93
1972	1.20	0.22	1.42
1973	1.05	0.31	1.35
1974	0.97	0.66	1.63
1975	0.92	−0.06	0.86

(a) Excludes full-blood Aborigines before 1961.

The average annual rate of population growth during the present century has been 1.73 per cent, but the results from year to year have deviated widely from this figure. In the following table the period 1 January 1901 to 31 December 1975 has been arranged into certain defined groups of years according to the occurrence of influences markedly affecting the growth of population.

POPULATION(a): PERIODIC RATES OF GROWTH, AUSTRALIA 1901 TO 1975

Period	Interval (years)	Total increase ('000)	Average annual numerical increase ('000)	Average annual rate of population growth (per cent)		
				Natural increase	Net migration	Total
1901 to 1913	13	1,128	87	1.55	0.49	2.04
1914 to 1923	10	862	86	1.49	0.15	1.64
1924 to 1929	6	680	113	1.26	0.62	1.88
1930 to 1939	10	569	57	0.82	0.02	0.85
1940 to 1946	7	513	73	0.98	0.01	1.01
1947 to 1952	6	1,222	204	1.37	1.19	2.54
1953 to 1961	9	1,862	207	1.40	0.79	2.17
1962 to 1970	9	2,021	225	1.16	0.85	1.95
1971 to 1975	5	937	187	1.12	0.36	1.48

(a) Excludes full-blood Aborigines before 1962.

Up to 1913, the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration from 1911 onwards by increased government assistance, was responsible for the comparatively high annual rate of 2.04 per cent during this period. The 1914–18 War was a dominating influence in the decade 1914–23, and its effects can be seen in the reduction of the rate from 2.04 to 1.64 per cent. From 1924 to 1929, more settled and prosperous conditions were experienced: encouraged migration was resumed on a large scale and, despite a further decline in the rate of natural increase owing to the persistent fall in the birth rate, the annual rate of growth rose to 1.88 per cent. After 1929, came the economic depression, and immigration ceased—in fact, Australia actually lost people through an excess of departures over arrivals in 1930, 1931, 1932 and 1935. The rate of natural increase also fell, and the annual rate of growth of the population fell to 0.85 per cent. With the outbreak of the 1939–45 War, Australia entered a new phase in her demographic history. The immediate effect of the war was to increase the number of marriages and to reverse the downward trend in fertility. The number of births increased each war year from 1940 to 1945, and these increases more than offset the rise in deaths due to war casualties and higher civilian death rates. As might be expected, migration over these years was negligible. The period 1947 to 1961 was marked by a continued high natural increase and a resumption of immigration, the latter resulting in very high net gains in each of the four years 1949 to 1952. During the period 1962 to 1970 net migration has continued at the same rate as in the previous decade but there was a decline in the crude birth rate and rate of natural increase from 1962. The years since 1970 have been characterised by a decreasing rate of natural increase, due to a decline in the birth rate, and a low rate of net migration increase resulting in the lowest rate of population growth for thirty years.

Rates of population growth from 1901 are shown for each State and Territory of Australia in the bulletin, *Demography* (*see also* Statistical Summary in this Year Book). Estimated rates of growth of the population of Australia in comparison with those for other countries of the world for the period 1970–1973 are shown in the table on page 157.

RATES OF NATURAL INCREASE AND NET MIGRATION(*a*): AUSTRALIA, 1951 TO 1975

Period	*Rate of natural increase(b)*	*Rate of net migration*
Average annual rate—		
1951–55	13.61	9.18
1956–60	13.81	8.13
1961–65	12.60	6.90
1966–70	11.05	8.18
1971–75	10.82	3.55
Annual rate—		
1971	12.96	6.62
1972	11.95	2.14
1973	10.39	3.07
1974	9.67	6.51
1975	9.15	−0.60

(*a*) Natural increase or net migration during each period per thousand of mean population for the period. (*b*) Excludes full-blood Aborigines before 1961.

Mean population

The mean populations given below are calculated for twelve-month periods to provide an average basis for calculations requiring allowance for the continuous change in population figures during such periods. Mean populations are used for the calculation of rates such as crude birth, death and marriage rates and per capita rates of consumption, income, etc.

The mean population for any year has been calculated by the formula:

$$\text{Mean population} = \frac{a + 4b + 2c + 4d + e}{12}$$

where a, b, c, d, and e, respectively, are the populations at the end of the quarter immediately preceding the year and at the end of each of the four succeeding quarters; e.g. in the case of a calendar year, 31 December of the preceding year, and 31 March, 30 June, 30 September and 31 December of the year under consideration. This formula gives a close approximation to the mean of a theoretical population progressing smoothly through the five values a, b, c, d, and e.

MEAN POPULATION: CALENDAR YEARS, 1971 TO 1975

Year ended 31 Dec.—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971	4,611,705	3,510,362	1,830,463	1,176,483	1,031,614	391,242	86,424	144,132	12,782,425
1972	4,673,329	3,557,678	1,873,334	1,189,378	1,056,508	393,183	91,610	157,221	12,992,241
1973	4,715,197	3,596,778	1,919,417	1,202,603	1,072,680	396,891	95,884	169,004	13,168,454
1974	4,761,786	3,644,370	1,968,502	1,220,687	1,098,671	401,574	101,735	180,134	13,377,459
1975	4,803,867	3,682,972	2,000,859	1,237,776	1,126,706	406,707	(*a*)88,554	192,236	13,539,677

MEAN POPULATION: FINANCIAL YEARS, 1970-71 TO 1974-75

Year ended 30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971	4,571,920	3,481,370	1,812,297	1,168,115	1,013,455	389,739	82,996	137,605	12,657,497
1972	4,646,786	3,535,807	1,850,988	1,183,704	1,046,627	392,399	89,195	150,767	12,896,273
1973	4,695,806	3,579,058	1,896,559	1,195,641	1,064,207	394,928	93,737	163,161	13,083,097
1974	4,737,490	3,618,474	1,944,581	1,210,851	1,084,650	398,953	98,618	174,943	13,268,560
1975	4,785,456	3,666,625	1,986,422	1,230,509	1,113,544	404,188	96,169	185,932	13,468,845

(*a*) Decrease due to the effects of cyclone 'Tracy'.

Geographic distribution of population

Criteria for the delimitation of urban boundaries

The criteria used for delimiting urban centres were determined by the Thirty-First Conference of Statisticians, October 1969, and are as follows.

At each Census of Population and Housing a boundary shall be defined in accordance with these Resolutions for each population cluster of 1,000 or more population (and, for known holiday resorts of less population, if they contain 250 or more dwellings of which at least 100 are occupied). These clusters shall be named *urban centres* and the population and dwellings enumerated in them shall be classified as urban for statistical purposes.

Resolution 3 stated that around each urban centre with a population of at least 100,000, a further boundary shall be defined, after consultation with planners, to contain the anticipated development of the urban centre and associated smaller urban centres for a period of at least twenty years. Such a boundary should delimit an area which is now, or is expected to be, socially and economically oriented towards the urban centre. It shall consist of complete local government areas if possible. This fixed boundary (as distinct from the urban boundary which is moving) will delimit an area which, for general statistical purposes, is free from the practical problems imposed by the moving boundary, but which nevertheless represents the city in a wider sense.

In delimiting urban centres with 25,000 or more population:

(*a*) all contiguous census collector's districts which have a population density of 200 or more persons per square kilometre shall be included. Consequently, State, statistical division, local government area and other administrative boundaries shall be disregarded;

(*b*) a collector's district which is known to contain a high proportion of holiday homes shall be classified as urban if the dwelling density is 50 dwellings per square kilometre or greater;

(*c*) a collector's district consisting mainly of land used for factories, airports, small sports areas, cemeteries, hostels, institutions, prisons, military camps or certain research stations shall be classified as urban if contiguous with collector's districts which are themselves urban;

(*d*) any collector's district which consists mainly of land used for large sporting areas, large parks, explosives handling and munitions areas, or holding yards associated with meatworks and abattoirs shall be classified as urban only if it is bordered on three sides by collector's districts which are themselves urban;

(*e*) any area which is completely surrounded by collector's districts which are urban must itself be classified as urban;

(*f*) where an urban centre of 25,000 or more population is separated from another urban centre by a gap in actual development of less than 3 kilometres (by the shortest rail or road distance), the gap shall be bridged by classifying a connecting collector's district or districts as urban, and therefore treating the urban centres as one; if the gap is 3 or more kilometres (and whether or not it is comprised mainly of reserved land or a natural barrier) the urban centres shall remain separate;

(*g*) any area included in an urban centre in 1971 or thereafter under the provisions of this Resolution shall continue to be so included unless the population of the urban centre falls below 25,000, in which case this Resolution will cease to apply;

(*h*) large peripheral collector's districts in growth areas shall be fragmented; and so far as the availability of visible boundary features allows, the fragments so created shall be as near square-shaped as possible and of such a size that they will contain a collector's workload when fully developed. For the purposes of delimiting urban centres such fragments shall be regarded as collector's districts.

In delimiting urban centres with less than 25,000 population:

(*a*) the urban centres shall be delimited subjectively (by the inspection of aerial photographs, by field inspection and/or by consideration of any other information that is available);

(*b*) all continuous urban growth is to be included (which, in small urban centres, would not necessarily occur if the density criterion were applied), together with any close but non-contiguous development which could be clearly regarded as part of the centre. However, cognisance shall be taken of Resolution 3 (*see* above), where appropriate, particularly in urban centres which are approaching a population of 25,000.

In selecting the boundaries for the splitting of collector's districts, cognisance shall be taken, where appropriate, of the boundaries of land-use zones:

(*a*) For State capital cities, nomenclature for the area delimited by—

(i) the urban, and
(ii) the outer boundary

shall be (using Melbourne as the example)—
(i) Urban Melbourne, and
(ii) Melbourne Statistical Division;

(*b*) In other cases where the dual boundary concept is employed, the nomenclature shall be (using Newcastle as the example)—
(i) Urban Newcastle, and
(ii) Newcastle Statistical District;

(*c*) In cases where only a single boundary is delineated, the nomenclature shall be (using Cairns as the example) Urban Cairns;

(*d*) Where an urban centre is formed by the coalescence of two or more named localities, the urban centre shall be assigned a name agreed upon after consultation with the Deputy Commonwealth Statistician of the State concerned.

These criteria were similar to those used at the 1966 Census, the main changes being:

(*a*) the elimination of the 'indentation' provision. At the 1966 Census an indented area was included within the urban centre if the distance across the 'neck' was less than one mile;

(*b*) a re-interpretation of the 'enclosure' rule. At the 1966 Census land was included within the urban centre if it was completely surrounded by the urban centre itself (or in part by the sea or a wide unbridged river). In 1971, if one part of this surround was the sea or a wide unbridged river this rule was not applied.

At the 1971 Census these concepts were used to determine the urban boundaries of all those centres expected to reach 25,000 population in 1971. These were Sydney, Broken Hill, Maitland, Newcastle, Tamworth, Wagga Wagga, Gosford-Woy Woy and Wollongong in New South Wales; Albury-Wodonga, which is in both New South Wales and Victoria; Melbourne, Geelong, Ballarat and Bendigo in Victoria; Brisbane, Bundaberg, Cairns, Mackay, Rockhampton, Toowoomba and Townsville in Queensland; Gold Coast, which is in both New South Wales and Queensland; Adelaide and Whyalla in South Australia; Perth in Western Australia; Hobart and Launceston in Tasmania; Canberra, which is in both the Australian Capital Territory and New South Wales; and Darwin in the Northern Territory.

A change in nomenclature has been made with the introduction of the term *major urban* in place of *metropolitan*. At the 1966 Census, the latter covered the capital city urban areas. At the 1971 Census *major urban* covers population living in urban centres of 100,000 or more population. Thus in New South Wales the term covers urban population in Sydney, Newcastle, Wollongong and that part of the Municipality of Queanbeyan which is included in Urban Canberra. In Victoria it refers to the urban population in Melbourne and Geelong, and in other States the capital city urban population.

The population classified as *rural* at the 1971 Census comprises those persons who were not enumerated in urban centres and who were not classified as *migratory*. The migratory population comprises those persons who, on the night of 30 June, were travelling on board ships in Australian ports, or on board ships travelling between Australian ports, or were enumerated on long-distance trains, motor coaches, or on aircraft.

URBAN AND RURAL POPULATION(*a*): CENSUS 30 JUNE 1971

Division	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
					PERSONS				
Major urban .	3,176,980	2,509,298	818,423	809,482	641,800	129,928	..	140,864	8,226,775
Other urban .	897,600	562,830	631,585	183,187	198,395	159,652	55,411	..	2,688,660
Total urban	*4,074,580*	*3,072,128*	*1,450,008*	*992,669*	*840,195*	*289,580*	*55,411*	*140,864*	*10,915,435*
Rural . . .	520,641	427,920	373,392	179,148	187,657	100,418	30,605	3,199	1,822,980
Migratory . .	5,959	2,303	3,665	1,890	2,617	415	374	..	17,223
Total .	**4,601,180**	**3,502,351**	**1,827,065**	**1,173,707**	**1,030,469**	**390,413**	**86,390**	**144,063**	**12,755,638**
					PERCENTAGES				
Major urban .	69.05	71.65	44.79	68.97	62.28	33.28	..	97.78	64.50
Other urban .	19.51	16.07	34.57	15.61	19.25	40.89	64.14	..	21.08
Total urban	*88.56*	*87.72*	*79.36*	*84.58*	*81.54*	*74.17*	*64.14*	*97.78*	*85.57*
Rural . . .	11.32	12.22	20.44	15.26	18.21	25.72	35.43	2.22	14.29
Migratory . .	0.13	0.07	0.20	0.16	0.25	0.11	0.43	..	0.14
Total .	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*a*) Includes Aborigines. For definition of urban, rural, etc., *see* explanation preceding this table.

Classification of urban centres by size

The following table classifies the urban centres in Australia into grades of size of population at the Censuses of 30 June 1966 and 1971.

A table showing the aggregate urban population at the 1961 Census of all cities and towns outside the metropolitan area of each State with 2,000 or more, and 3,000 or more, urban inhabitants was included in Year Book No. 51, page 267. A table showing similar data for the 1954 Census was included in Year Book No. 47, page 295 and one for the 1947 Census in Year Book No. 40, page 334. Comparisons between these various tables can be made only if allowance is made for changes in the status and structure of local government areas and for changes in the manner of determining urban population at each census.

URBAN CENTRES: NUMBER AND POPULATION(*a*) IN GROUPS OF VARIOUS SIZES
AUSTRALIA, CENSUSES 1966 AND 1971

	Census, 30 June 1966			*Census, 30 June 1971*		
Population size of urban centres	*Number of urban centres*	*Population*	*Percentage of Australian population*	*Number of urban centres*	*Population*	*Percentage of Australian population*
500,000 and over . .	5	6,497,827	56.02	5	7,388,886	57.93
100,000–499,999 . .	4	620,705	5.35	5	837,889	6.57
75,000– 99,999 . .	1	92,311	0.80	..	..	..
50,000– 74,999 . .	5	279,031	2.41	5	321,270	2.52
25,000– 49,999 . .	5	178,108	1.54	12	408,751	3.20
20,000– 24,999 . .	11	248,664	2.14	8	177,712	1.39
15,000– 19,999 . .	17	286,020	2.47	16	276,541	2.17
10,000– 14,999 . .	19	225,779	1.95	22	259,992	2.04
5,000– 9,999 . .	61	445,982	3.85	66	467,184	3.66
2,500– 4,999 . .	103	355,532	3.07	110	378,964	2.97
2,000– 2,499 . .	50	110,830	0.96	52	115,700	0.91
1,000– 1,999 . .	178	253,686	2.19	180	257,922	2.02
Less than 1,000(*b*) .	27	18,873	0.16	38	24,624	0.19
Total urban population	**486**	**9,613,348**	**82.88**	**519**	**10,915,435**	**85.57**
Cumulative—						
500,000 and over .	5	6,497,827	56.02	5	7,388,886	57.93
100,000 ,, ,, .	9	7,118,532	61.37	10	8,226,775	64.50
75,000 ,, ,, .	10	7,210,843	62.17	10	8,226,775	64.50
50,000 ,, ,, .	15	7,489,874	64.57	15	8,548,045	67.01
25,000 ,, ,, .	20	7,667,982	66.11	27	8,956,796	70.22
20,000 ,, ,, .	31	7,916,646	68.25	35	9,134,508	71.61
15,000 ,, ,, .	48	8,202,666	70.72	51	9,411,049	73.78
10,000 ,, ,, .	67	8,428,445	72.66	73	9,671,041	75.82
5,000 ,, ,, .	128	8,874,427	76.51	139	10,138,225	79.48
2,500 ,, ,, .	231	9,229,959	79.57	249	10,517,189	82.45
2,000 ,, ,, .	281	9,340,789	80.53	301	10,632,889	83.36
1,000 ,, ,, .	459	9,594,475	82.72	481	10,890,811	85.38
Total urban population	**486**	**9,613,348**	**82.88**	**519**	**10,915,435**	**85.57**

(*a*) Includes Aborigines. (*b*) Urban centres classified as such on grounds other than population and density.

Urban population centres

At the Census of 30 June 1966 new methods were used to define the boundaries of capital city and other urban areas for statistical purposes. These methods, and modifications made for the 1971 Census, are described on pages 142–3.

Annual post-censal population estimates are made for all local government areas. Copies of publications showing the estimated population of local government areas, statistical divisions and statistical districts can be obtained from the office of the Deputy Commonwealth Statistician in each capital city.

Post-censal estimates for the urban centres recognised at the census but not definable in terms of local government area boundaries, are available only for Tasmania. For the capital cities and for some other cities and towns the definition of urban boundaries has resulted in the urban population as delineated at the 1971 Census being significantly larger than the population within the corresponding local government area of the same name. For further details *see also* Bulletin 6, *Population and Dwellings in Local Government Areas and Urban Centres*, parts 1–9, Census of Population and Housing, 30 June 1971.

The following table shows population in statistical divisions (for State Capital cities) and statistical districts (for other major cities—viz., Canberra, Newcastle, Wollongong and Geelong). These boundaries, which are fixed, circumscribe the area which is now, or is expected to be, socially and economically oriented towards the urban centre with a population of 100,000 or more. The statistical division and statistical district boundaries are expected to remain unchanged for a substantial number of years.

POPULATION IN STATISTICAL DIVISIONS AND STATISTICAL DISTRICTS, 1971, 1974 AND 1975

		Population at 30 June		
Area(a)	*State*	*1971(b)*	*1974*	*1975*
Sydney Statistical Division	N.S.W.	2,807,828	2,898,330	2,922,760
Newcastle Statistical District	N.S.W.	351,536	360,090	363,010
Wollongong Statistical District	N.S.W.	199,048	208,550	211,240
Melbourne Statistical Division	Vic.	2,503,450	2,620,400	2,661,400
Geelong Statistical District	Vic.	122,087	128,370	129,651
Brisbane Statistical Division(*c*)	Qld	867,784	940,800	958,800
Adelaide Statistical Division	S.A.	842,693	885,400	899,300
Perth Statistical Division	W.A.	703,199	760,000	787,300
Hobart Statistical Division	Tas.	153,216	161,320	164,010
Canberra Statistical District(*d*)	A.C.T.	158,880	197,900	210,600

(*a*) The population of all component local government areas may be obtained from the relevant bulletin issued by the office of the Deputy Commonwealth Statistician of the State concerned. (*b*) Population at census date. (*c*) Includes Ipswich; the population of the City of Ipswich was 66,100 at 30 June 1974 and 67,500 at 30 June 1975. (*d*) Includes the City of Queanbeyan in New South Wales (18,700 at 30 June 1974 and 20,070 at 30 June 1975).

The following table shows the urban population centres exceeding 10,000 population in each State and Territory at the Census of Population and Housing, 30 June 1971 and, at 30 June 1972 to 1975.

POPULATION IN PRINCIPAL URBAN CENTRES AND RELATED LOCAL GOVERNMENT AREAS, 1971 TO 1975

(with populations of 10,000 or more at 30 June 1971)

	Population at 30 June—				
Area	*1971(a)*	*1972*	*1973*	*1974*	*1975*
New South Wales—					
Albury (urban centre)(*b*)	27,403	. .	. .	. .	. .
Albury (City)	28,420	29,220	29,800	31,350	32,250
Armidale (City)	18,156	18,660	19,210	19,810	20,300
Bathurst (City)(*d*)	17,196	17,500	17,680	17,990	18,060
Broken Hill (City)	29,808	29,310	28,810	28,310	28,160
Budgewoi Lake (urban centre)	10,245	. .	. .	. .	. .
Wyong (Shire)	32,967	34,770	36,770	38,700	40,400
Cessnock–Bellbird (urban centre)	16,160	(Incl. in Newcastle Statistical District)			
Greater Cessnock (City)(*c*)	34,321	34,370	34,460	34,530	34,730
Coffs Harbour (urban centre)	10,088	. .	. .	. .	. .
Coffs Harbour (Shire)	18,633	19,530	20,480	21,280	22,280
Dubbo (Municipality)(*d*)	17,810	18,190	18,430	18,750	19,000
Gosford–Woy Woy (urban centre)	38,205	. .	. .	. .	. .
Gosford (Shire)	56,373	58,970	61,970	64,970	67,470
Goulburn (City)	21,606	21,740	21,810	21,910	22,160
Grafton (City)	16,387	16,460	16,560	16,610	16,660
Griffith (urban centre)	11,031	. .	. .	. .	. .
Wade (Shire)	18,813	18,980	19,130	19,270	19,390
Katoomba–Wentworth Falls (urban centre)	11,620	. .	. .	. .	. .
Blue Mountains (City)(*e*)	18,438	18,790	19,390	20,090	20,690
Kurri Kurri–Weston (urban centre)	11,613	(Incl. in Newcastle Statistical District)			
Greater Cessnock (City)		*See* under Cessnock—Bellbird, above			
Lismore (City)	20,904	21,100	21,300	21,550	21,650
Lithgow (urban centre)	13,146	. .	. .	. .	. .
Lithgow (City)	12,825	12,800	12,300	12,830	12,750
Maitland (urban centre)	24,537	(Incl. in Newcastle Statistical District)			
Maitland (City)	31,051	31,650	32,250	32,750	33,200

For footnotes, *see* end of table.

POPULATION IN PRINCIPAL URBAN CENTRES AND RELATED LOCAL GOVERNMENT AREAS, 1971 TO 1975—*continued*

(with populations of 10,000 or more at 30 June 1971)

Area	*Population at 30 June—*				
	1971(a)	*1972*	*1973*	*1974*	*1975*
Newcastle (urban centre)	250,346	(Incl. in Newcastle Statistical District)			
Newcastle (City)	146,009	146,310	146,460	146,710	146,900
Lake Macquarie (Shire)(*d*)	122,421	124,220	126,220	127,920	129,680
Nowra–Bomaderry (urban centre)	12,873	..	..	..	..
Shoalhaven (Shire)	28,570	29,920	31,320	32,370	33,570
Orange (urban centre)	24,185	..	..	..	..
Orange (City)	23,172	23,520	24,020	24,600	24,830
Queanbeyan (N.S.W. portion of Canberra urban centre)	15,434	..	..	..	..
Queanbeyan (City)(*d*)	16,058	16,960	17,810	18,700	20,070
Richmond–Windsor (urban centre)	11,389	(Incl. in Sydney Statistical Division)			
Windsor (Municipality)	15,485	15,890	16,390	16,840	17,240
Sydney (urban centre)	2,725,064	(Incl. in Sydney Statistical Division)			
Tamworth (urban centre)	24,665	..	..	..	..
Tamworth (City)	24,092	24,440	24,790	25,090	25,360
Taree (urban centre)	11,943	..	..	..	..
Taree (Municipality)	11,493	11,650	11,810	11,960	12,160
The Entrance (urban centre)(*f*)	13,728	..	..	..	..
Wyong (Shire)		*See* under Budgewoi Lake, above			
Wagga Wagga (urban centre)	27,719	..	..	..	..
Wagga Wagga (City)(*d*)	28,905	29,510	30,310	31,160	32,510
Wollongong (urban centre)	186,136	(Incl. in Wollongong Statistical District)			
Wollongong (City)	161,143	163,540	165,240	166,690	168,190
Shellharbour (Municipality)	31,154	32,360	33,460	34,660	35,700
Victoria—					
Ballarat (urban centre)	58,620	..	..	..	..
Ballaarat (City) and Sebastopol (Borough)	45,046	44,640	44,360	44,040	43,870
Ballarat (Shire)	14,405	15,050	15,550	16,150	16,480
Bendigo (urban centre)	45,936	..	..	..	..
Bendigo (City) and Eaglehawk (Borough)(*d*)	37,390	37,620	37,780	38,010	38,190
Marong and Strathfieldsaye (Shires)(*d*)	14,616	14,880	15,320	15,710	16,080
Colac (urban centre)	10,362	..	..	..	..
Colac (City)	9,679	9,730	9,740	9,760	9,793
Geelong (urban centre)	115,181	(Incl. in Geelong Statistical District)			
Geelong, Geelong West and Newtown (Cities)	46,705	45,720	44,730	44,750	(*g*)43,212
Bellarine and Corio (Shires) and South Barwon (City)(*d*)(*h*)	74,666	77,310	80,160	82,570	(*g*)85,509
Horsham (City)	11,045	11,040	11,100	11,170	11,320
Melbourne (urban centre)	2,394,117	(Incl. in Melbourne Statistical Division)			
Mildura (City)(*d*)	13,198	14,240	14,280	14,350	14,390
Moe–Yallourn (urban centre)(*i*)	20,863	..	..	..	..
Moe (City) and Yallourn Works Area(*d*)	18,826	18,600	18,370	18,020	17,910
Morwell (urban centre)	16,853	..	..	..	..
Morwell (Shire)(*d*)	22,443	22,540	22,640	22,870	23,020
Sale (City)(*d*)	10,436	10,640	10,870	11,370	11,690
Shepparton (City)	19,410	19,780	20,170	20,620	20,890
Traralgon (City)	14,666	14,750	14,870	14,980	15,020
Wangaratta (City)(*d*)	15,586	15,620	15,670	15,790	15,860
Warnambool (City)	18,684	19,010	19,220	19,510	19,810
Werribee (urban centre)	12,872	(Incl. in Melbourne Statistical Division)			
Wodonga (urban centre)(*b*)	10,528	..	..	..	..
Wodonga (Rural City)(*d*)	13,074	13,270	13,520	13,900	14,430
Queensland—					
Brisbane (urban centre)	818,423	(Incl. in Brisbane Statistical Division)			
Bundaberg (urban centre)	26,516	..	..	..	..
Bundaberg (City)	27,324	27,650	28,000	28,500	29,100
Cairns (urban centre)	32,747	..	..	..	..
Cairns (City)	30,226	31,250	32,750	34,350	35,200
Gladstone (urban centre)	15,574	..	..	..	..
Gladstone (Town)	15,166	15,750	16,300	17,500	19,800

For footnotes *see* end of table

POPULATION IN PRINCIPAL URBAN CENTRES AND RELATED LOCAL GOVERNMENT AREAS, 1971 TO 1975—*continued*

(with population of 10,000 or more at 30 June 1971)

Area	*Population at 30 June—*				
	1971(a)	*1972*	*1973*	*1974*	*1975*
Gold Coast (urban centre)(*j*)	69,120	..	..	..	..
Gold Coast (City)	66,697	71,400	74,500	78,600	80,250
Gympie (City)	11,096	11,150	11,000	11,000	10,900
Mackay (urban centre)	28,554	..	..	..	..
Mackay (City)	19,148	19,250	19,600	20,400	20,550
Pioneer (Shire)	22,561	23,500	24,500	24,650	25,200
Maryborough (urban centre)	19,916	..	..	..	..
Maryborough (City)	19,257	19,150	19,050	19,100	19,000
Mount Isa (urban centre)	25,497	..	..	..	..
Mount Isa (City)	26,502	29,000	31,800	32,500	32,850
Rockhampton (urban centre)	48,213	..	..	..	..
Rockhampton (City)	49,164	49,800	50,300	51,100	51,500
Toowoomba (urban centre)	57,578	..	..	..	..
Toowoomba (City)	59,524	60,300	61,000	62,250	62,900
Townsville (urban centre)	68,591	..	..	..	..
Townsville (City)	71,265	73,500	76,500	79,500	82,500
South Australia—					
Adelaide (urban centre)	809,482	(Incl. in Adelaide Statistical Division)			
Mount Gambier (urban centre)	17,934	..	..	..	..
Mount Gambier (City)	17,386	17,350	17,350	17,600	17,750
Port Augusta (City)(*d*)	12,224	12,650	12,850	12,950	13,150
Port Pirie (urban centre)	15,456	..	..	..	..
Port Pirie (City)	13,227	12,900	12,750	12,550	12,300
Whyalla (urban centre)	32,109	..	..	..	..
Whyalla (City)(*d*)	31,570	32,500	33,250	33,500	33,800
Western Australia—					
Albany (urban centre)	13,101	..	..	..	..
Albany (Town)	12,482	12,600	12,400	12,200	12,250
Bunbury (Town)	17,779	18,750	18,600	18,450	18,550
Geraldton (urban centre)	15,457	..	..	..	..
Geraldton (Town)	15,118	15,550	15,550	15,700	15,950
Kalgoorlie-Boulder (urban centre)	20,865	..	..	..	..
Kalgoorlie (Town)(*d*)	9,201	9,300	9,800	9,800	9,500
Boulder (Shire)(*d*)	12,922	13,100	11,900	11,850	11,750
Kwinana–New Town (urban centre)	10,108	(Incl. in Perth Statistical Division)			
Rockingham (urban centre)	12,029	(Incl. in Perth Statistical Division)			
Kwinana and Rockingham (Shires)(*k*)	23,832	25,300	25,500	26,000	28,000
Perth (urban centre)	641,800	(Incl. in Perth Statistical Division)			
Tasmania—					
Burnie–Somerset (urban centre)	20,087	20,380	20,460	20,660	21,060
Devonport (urban centre)	18,183	18,630	19,230	19,770	20,270
Hobart (urban centre) (Incl. in Hobart Statistical Division)	129,928	130,980	133,080	135,300	136,550
Launceston (urban centre)	62,241	62,250	62,730	63,400	64,850
Northern Territory—					
Alice Springs (Town)	11,179	11,940	(*g*)12,762	13,500	13,400
Darwin (urban centre)	35,516	..	..	..	..
Greater Darwin	37,060	39,851	(*g*)42,858	(*g*)46,656	32,144
Australian Capital Territory—					
Canberra (urban centre)	(*l*)140,864	(Incl. in Canberra Statistical District)			
Canberra (City District)	141,810	155,050	(*g*)166,116	178,100	189,400

(*a*) Population at census date. (*b*) Parts of the Albury-Wodonga urban centre in New South Wales and Victoria respectively. (*c*) Excluding that part of Greater Cessnock which lies outside the Newcastle Statistical District and which had a population of 586 at the Census of 30 June 1971. (*d*) For details of changes in status and area between 1 July 1971 and 30 June 1975 *see* paragraph 6, page 2, *Population: Principal Cities and Towns*, 1971 to 1975, (4.18). (*e*) Excluding that part of Blue Mountains which lies inside Sydney Statistical Division. (*f*) Part of the Entrance urban centre (299 persons at 30 June 1971) extends into Gosford Shire. (*g*) Result of population count. (*h*) Excluding those parts of Bellarine, Corio and South Barwon Shires which lie outside the Geelong Statistical District and which had a total population of 14,100 at 30 June 1975. (*i*) Parts of Moe-Yallourn urban centre (2,037 persons at 30 June 1971) lie within Narracan and Morwell Shires. (*j*) That part of Gold Coast urban centre in Queensland. The total population of Gold Coast urban centre was 74,240 at 30 June 1971. (*k*) Because Rockingham urban centre lies partly inside Kwinana Shire the combined figure is given for the Kwinana and Rockingham Shires. (*l*) Excluding that part of Canberra urban centre in New South Wales. The total population of Canberra urban centre at 30 June 1971 was 156,298.

Principal cities of the world

The following table shows the population of the world's largest cities at the latest available date. The data refer to urban agglomerations, where available; in other cases the so-called city proper. The urban agglomeration is defined on page 23 of the United Nations *Demographic Yearbook* 1973, from which most of the figures in the table have been taken, as including also the suburban fringe or thickly settled territory lying outside of, but adjacent to, the city boundaries. (*See also* the Technical Notes on Statistical Tables and footnotes to the table in the *Demographic Yearbook*). International comparability is limited by different methods used in constructing the estimates, variations in national concepts of urban boundaries, and the different dates to which the statistics refer.

POPULATION OF THE WORLD'S LARGEST CITIES

City	*Country*	*Year*	*Population(a)*	*City*	*Country*	*Year*	*Population(a)*
			('000)				('000)
Tokyo	Japan	1972	11,582	San Francisco(*b*)	U.S.A.	1970	3,110
New York(*b*)(*c*)	U.S.A.	1970	11,572	Sydney	Australia	1975	(*e*)2,923
Shanghai	China	1970	(*d*)10,820	Osaka	Japan	1972	2,889
Mexico City	Mexico	1973	10,223	Washington(*b*)	U.S.A.	1970	2,861
Buenos Aires	Argentina	1970	8,353	Bogota	Colombia	1972	2,818
Paris	France	1968	8,197	Rome	Italy	1971	(*d*)2,800
Peking	China	1970	(*d*)7,570	Montreal	Canada	1972	2,761
Moscow	U.S.S.R.	1973	7,410	Boston	U.S.A.	1970	2,754
London	England	1972	7,341	Toronto	Canada	1972	2,672
Los Angeles(*b*)	U.S.A.	1970	7,032	Santiago	Chile	1970	2,662
Calcutta	India	1971	7,031	Melbourne	Australia	1975	(*e*)2,661
Chicago(*b*)	U.S.A.	1970	6,979	Yokohama	Japan	1972	2,433
Bombay	India	1971	(*d*)5,971	Pittsburgh	U.S.A.	1970	2,401
Seoul	Korea	1970	(*d*)5,433	Manchester	England	1971	2,387
Sao Paulo	Brazil	1970	(*d*)5,187	Birmingham	England	1971	2,372
Cairo	Egypt	1970	(*d*)4,961	St Louis(*b*)	U.S.A.	1970	2,363
Philadelphia(*b*)	U.S.A.	1970	4,818	Caracas	Venezuela	1970	2,175
Djakarta	Indonesia	1971	(*d*)4,576	Lahore	Pakistan	1972	(*d*)2,148
Tientsin	China	1970	(*d*)4,280	Singapore	Singapore	1970	2,075
Rio de Janeiro	Brazil	1970	(*d*)4,252	Baltimore	U.S.A.	1970	2,071
Detroit	U.S.A.	1970	4,200	Nagoya	Japan	1972	2,065
Leningrad	U.S.S.R.	1973	4,133	Cleveland	U.S.A.	1970	2,064
Teheran	Iran	1972	(*d*)3,858	West Berlin	Germany	1973	(*d*)(*f*)2,063
Delhi	India	1971	3,647	Budapest	Hungary	1972	(*d*)2,033
Karachi	Pakistan	1972	(*d*)3,469	Alexandria	Egypt	1970	(*d*)2,032
Madras	India	1971	3,170	Houston	U.S.A.	1970	1,985
Lima	Peru	1972	3,158	Bangkok	Thailand	1970	(*d*)1,867
Instanbul	Turkey	1973	3,135	Newark(*c*)	U.S.A.	1970	1,857
Madrid	Spain	1970	3,146	Pusan	Korea	1970	1,842

(*a*) Urban agglomeration, except where otherwise stated. (*b*) 'Standard metropolitan statistical area'. (*c*) The population of New York—North-Eastern New Jersey urbanised area was 16,037,395 on 1 July 1970. (*d*) City proper. (*e*) Statistical Division. (*f*) East Berlin, 1971, 1,086,374.

Sex distribution of the population

The number of males to each hundred females has been adopted as a measure of the 'masculinity' of the population. With the exception of some dislocation arising from the two World Wars, there was a continuous diminution of the masculinity of the population until 1945. This resulted mainly from a decline in the proportion of overseas-born in the population and in their masculinity. At the census of 1901 the overseas-born comprised 23 per cent of the population and had a masculinity of 151 per cent. By 1947 these proportions had declined to 10 per cent and 127 per cent, with a consequent decline in the masculinity of the total population. Although the proportion of overseas-born has increased since 1947, with the resumption of immigration, its masculinity has declined and there has thus been little change in the masculinity of the total population.

POPULATION(*a*): MASCULINITY, DECEMBER 1950 TO 1975
(Number of males per 100 females)

31 Dec.—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1950	100.88	99.27	106.02	101.83	106.07	102.70	188.05	123.33	101.83
1955	101.27	101.38	105.17	102.78	105.87	103.63	163.88	107.77	102.52
1960	101.38	101.35	104.16	102.24	103.99	102.88	147.82	111.51	102.22
1965	100.68	100.52	102.99	101.03	103.99	101.83	123.36	108.70	101.43
1970	100.50	99.87	101.83	99.74	105.32	101.28	128.41	104.64	101.05
1971	100.39	99.75	101.70	99.64	105.22	101.06	125.80	104.67	100.94
1972	100.27	99.71	101.52	99.28	104.62	100.70	120.51	104.96	100.75
1973	100.13	99.61	101.48	99.22	104.58	100.30	118.39	104.77	100.65
1974	100.02	99.72	101.61	99.40	104.05	100.02	136.54	104.16	100.66
1975	99.83	99.68	101.39	99.53	104.01	100.02	118.21	103.43	100.51

(*a*) Excludes full-blood Aborigines before 1961.

Age distribution of the population

The next table shows the changes which have taken place in the age distribution of the population of Australia at each census since 1871.

POPULATION: PROPORTIONAL AGE DISTRIBUTION, AUSTRALIA 1871 TO 1971

(Per cent)

	Males				*Females*				*Persons*			
Census	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*	*Under 15 years*	*15 years and under 65*	*65 years and over*	*Total*
1871	38.84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881	36.43	60.78	2.79	100	41.91	56.04	2.04	100	38.95	58.60	2.44	100
1891	34.82	61.96	3.22	100	39.40	58.03	2.57	100	36.94	60.14	2.92	100
1901	33.89	61.78	4.33	100	36.52	59.82	3.66	100	35.14	60.85	4.01	100
1911	30.89	64.74	4.37	100	32.49	63.27	4.24	100	31.66	64.03	4.31	100
1921	31.67	63.86	4.46	100	31.80	63.83	4.37	100	31.73	63.85	4.42	100
1933	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100
1947	25.48	67.08	7.43	100	24.62	66.71	8.67	100	25.06	66.90	8.05	100
1954	28.81	63.82	7.37	100	28.23	62.52	9.25	100	28.52	63.17	8.30	100
1961	30.61	62.16	7.23	100	29.85	60.34	9.82	100	30.23	61.26	8.51	100
1966(*a*)	29.93	62.98	7.09	100	28.92	61.10	9.99	100	29.43	62.05	8.53	100
1971(*a*)	29.32	63.71	6.97	100	28.21	62.04	9.75	100	28.77	62.88	8.35	100

(*a*) Includes full-blood Aborigines.

Estimates of the age distribution of population, based on the census distribution of ages and records of births, ages at death, and ages of migrants, are made for intercensal years. The following estimated age distribution of the Australian population at 30 June 1975 will be subject to revision when the 1976 Census results for distribution of ages become available.

POPULATION: ESTIMATED AGE DISTRIBUTION(*a*) AUSTRALIA, 30 JUNE 1975

	30 June 1975		
Age last birthday (years)	*Males*	*Females*	*Persons*
0–4	646,475	615,973	1,262,448
5–9	620,315	594,656	1,214,971
10–14	643,546	611,847	1,255,393
15–19	622,989	592,125	1,215,114
20–24	579,348	558,383	1,137,731
25–29	573,676	545,255	1,118,931
30–34	472,283	443,966	916,249
35–39	406,545	386,266	792,811
40–44	380,123	358,696	738,819
45–49	403,358	378,395	781,753
50–54	377,377	373,222	750,599
55–59	298,016	308,165	606,181
60–64	269,623	286,498	556,121
65–69	200,685	232,732	433,417
70–74	139,330	177,470	316,800
75–79	78,835	128,742	207,577
80–84	41,263	82,054	123,317
85 and over	21,780	52,305	74,085
Total	**6,775,567**	**6,726,750**	**13,502,317**

(*a*) Based on the age distribution of all persons enumerated at the Census of 30 June 1971 adjusted for mis-statement of age and on subsequent births, recorded ages at death and recorded ages of migrants.

General characteristics of the population, Censuses 1966 and 1971

Particulars of the characteristics of the population of Australia at the 1971 Census compared with the 1966 Census are shown in this section. Information from the 1971 Census for individual States and Territories is available in Bulletin No. 1 *Summary of Population*, Parts 1-9. Information concerning the industry, occupational status, and occupations of the population as recorded at the 1971 Census is given in the chapter Employment and Unemployment, and on dwellings in the chapter Housing and Building.

The characteristics dealt with in the following pages are: age; marital status; country of birth; period of residence in Australia of overseas-born; religion. Further details are available in a series of bulletins which were published by the Bureau (for details *see Publications of the Australian Bureau of Statistics*, (1.8)). All tables include particulars of full-blood Aborigines.

POPULATION: AGE (GROUPED AGES)(*a*), BY SEX, AUSTRALIA, CENSUSES, 1966 AND 1971

Age last birthday (years)	*Census, 30 June 1966*			*Census, 30 June 1971*			*Increase 1966–1971*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
0– 4	589,956	561,098	1,151,054	626,002	597,440	1,223,442	72,388
5– 9	599,117	570,833	1,169,950	625,955	594,300	1,220,255	50,305
10–14	559,137	533,071	1,092,208	628,600	597,755	1,226,355	134,147
15–19	539,052	513,487	1,052,539	567,960	542,236	1,110,196	57,657
20–24	438,623	418,936	857,559	558,166	538,779	1,096,945	239,386
25–29	385,961	363,318	749,279	480,748	452,779	933,527	184,248
30–34	357,216	333,285	690,501	412,476	388,657	801,133	110,632
35–39	398,828	368,452	767,280	380,948	358,888	739,836	−27,444
40–44	397,822	378,404	776,226	407,539	379,976	787,515	11,289
45–49	344,171	335,581	679,752	399,611	381,913	781,524	101,772
50–54	324,659	318,574	643,233	332,641	330,295	662,936	19,703
55–59	276,763	267,508	544,271	301,464	303,971	605,435	61,164
60–64	216,203	220,377	436,580	243,740	257,804	501,544	64,964
65–69	162,119	195,578	357,697	183,270	203,493	386,763	29,066
70–74	115,582	161,212	276,794	123,915	168,735	292,650	15,856
75–79	79,813	116,902	196,715	76,080	123,687	199,767	3,052
80–84	38,654	64,352	103,006	42,926	76,940	119,866	16,860
85 and over	17,912	36,942	54,854	20,670	45,279	65,949	11,095
Total	**5,841,588**	**5,757,910**	**11,599,498**	**6,412,711**	**6,342,927**	**12,755,638**	**1,156,140**

(*a*) Recorded ages adjusted by the distribution of ages 'not stated'.
Minus sign (—) denotes decrease.

POPULATION: MARITAL STATUS, BY SEX, AUSTRALIA, CENSUSES, 1966 AND 1971

Marital status	*Census, 30 June 1966*			*Census, 30 June 1971*			*Increase 1966–1971*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Never married—							
Under 15 years of age	1,747,696	1,664,529	3,412,225	1,880,557	1,789,495	3,670,052	257,827
15 years of age and over	1,252,635	902,854	2,155,489	1,327,684	943,824	2,271,508	116,019
Total never married	*3,000,331*	*2,567,383*	*5,567,714*	*3,208,241*	*2,733,319*	*5,941,560*	*373,846*
Married	2,600,044	2,587,196	5,187,240	2,926,865	2,924,004	5,850,869	663,629
Married but permanently separated(*a*)	75,438	87,536	162,974	86,337	97,052	183,389	20,415
Divorced	42,908	51,174	94,082	61,749	71,421	133,170	39.088
Widowed	122,867	464,621	587,488	129,519	517,131	646,650	59,162
Grand total	**5,841,588**	**5,757,910**	**11,599,498**	**6,412,711**	**6,342,927**	**12,755,638**	**1,156,140**

(*a*) Legally or otherwise.

POPULATION: COUNTRY OF BIRTH, BY SEX, AUSTRALIA, CENSUSES, 1966 AND 1971

Country of birth	*Census, 30 June 1966*			*Census, 30 June 1971*			*Increase 1966–1971*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Australia	4,688,441	4,780,137	9,468,578	5,037,098	5,139,222	10,176,320	707,742
New Zealand	26,174	26,311	52,485	41,350	39,116	80,466	27,981
Europe—							
United Kingdom and Republic of Ireland(*a*)	474,427	434,237	908,664	562,869	525,341	1,088,210	179.546
Germany	55,799	52,910	108,709	56,196	54,615	110,811	2,102
Greece	73,936	66,153	140,089	83,483	76,717	160,200	20,111
Italy	150,138	117,187	267,325	159,492	129,984	289,476	22,151
Malta	31,028	24,076	55,104	29,546	24,135	53,681	−1,423
Netherlands	55,189	44,360	99,549	54,846	44,449	99,295	−254
Poland	36,496	25,145	61,641	34,753	24,947	59,700	−1,941
Yugoslavia	44,573	26,704	71,277	74,695	55,121	129,816	58,539
Other	103,348	77,805	181,153	115,141	90,148	205,289	24,136
Total Europe	1,024,934	868,577	1,893,511	1,171,021	1,025,457	2,196,478	302,967
Other countries	102,039	82,885	184,924	163,242	139,132	302,374	117,450
Total born outside Australia	*1,153,147*	*977,773*	*2,130,920*	*1,375,613*	*1,203,705*	*2,579,318*	*448,398*
Grand total	**5,841,588**	**5,757,910**	**11,599,498**	**6,412,711**	**6,342,927**	**12,755,638**	**1,156,140**

(*a*) Includes Ireland (undefined).
Minus sign (—) denotes decrease.

POPULATION: OVERSEAS-BORN, BY PERIOD OF RESIDENCE IN AUSTRALIA, AND SEX CENSUSES, 1966 AND 1971

Period of residence (years)	*Census, 30 June 1966*			*Census, 30 June 1971*			*Increase 1966–1971*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Under 1	88,608	73,252	161,860	99,894	85,483	185,377	23,517
1 and under 2	65,980	58,361	124,341	87,636	77,963	165,599	41,258
2 ,, ,, 3	58,366	51,963	110,329	74,971	66,648	141,619	31,290
3 ,, ,, 4	46,104	41,934	88,038	54,663	48,706	103,369	15,331
4 ,, ,, 5	35,623	37,279	72,902	52,630	47,311	99,941	27,039
5 years and over	833,170	693,902	1,527,072	919,986	794,788	1,714,774	187,702
Not stated	25,296	21,082	46,378	85,833	82,806	168,639	122,261
Total	**1,153,147**	**977,773**	**2,130,920**	**1,375,613**	**1,203,705**	**2,579,318**	**448,398**

POPULATION: RELIGIOUS DENOMINATION, BY SEX, AUSTRALIA CENSUSES, 1966 AND 1971

Religious denomination	*Census, 30 June 1966*			*Census, 30 June 1971*			*Increase 1966–1971*
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	
Christian—							
Baptist	78,443	87,779	166,222	82,479	93,490	175,969	9,747
Brethren	7,491	8,180	15,671	10,900	12,063	22,963	7,292
Catholic, Roman and Catholic undefined	1,532,930	1,509,577	3,042,507	1,718,674	1,723,960	3,442,634	400,127
Churches of Christ	48,566	54,694	103,260	44,714	52,709	97,423	−5,837
Church of England	1,933,567	1,951,451	3,885,018	1,941,897	2,011,307	3,953,204	68,186
Congregational	35,933	40,689	76,622	31,289	36,870	68,159	−8,463
Greek and other Orthodox	135,623	119,877	255,500	177,324	161,308	338,632	83,132
Jehovah's Witness	n.a.	n.a.	n.a.	16,031	19,721	35,752	n.a.
Lutheran	91,279	88,554	179,833	98,316	98,531	196,847	17,014
Methodist	549,751	577,209	1,126,960	527,724	571,295	1,099,019	−27,941
Presbyterian	513,019	532,545	1,045,564	497,793	530,788	1,028,581	−16,983
Salvation Army	27,188	29,497	56,685	30,823	35,008	65,831	9,146
Seventh-day Adventist	17,175	20,877	38,052	18,680	22,937	41,617	3,565
Protestant (undefined)	53,028	52,346	105,374	118,449	124,753	243,202	137,828
Other (incl. Christian undefined)	64,663	68,481	133,144	89,254	91,292	180,546	n.a.
Total Christian	*5,088,656*	*5,141,756*	*10,230,412*	*5,404,347*	*5,586,032*	*10,990,379*	*759,967*
Non-Christian—							
Hebrew	31,303	31,972	63,275	30,619	31,589	62,208	−1,067
Muslim	n.a.	n.a.	n.a.	13,600	8,711	22,311	n.a.
Other	8,804	4,843	13,647	8,434	5,970	14,404	n.a.
Total non-Christian	*40,107*	*36,815*	*76,922*	*52,653*	*46,270*	*98,923*	*22,001*
Indefinite	19,905	16,645	36,550	16,755	12,658	29,413	−7,137
No religion	61,623	34,517	96,140	517,360	338,316	855,676	759,536
No reply	631,297	528,177	1,159,474	421,596	359,651	781,247	−378,227
Grand total	**5,841,588**	**5,757,910**	**11,599,498**	**6,412,711**	**6,342,927**	**12,755,638**	**1,156,140**

Minus sign (−) denotes decrease.

The Aboriginal population of Australia

In Year Book No. 17, pages 951–61, a brief account was given of the Australian Aboriginal population, its origin, its numbers as estimated from time to time and the steps taken for its protection. On pages 914–16 of Year Book No. 22 particulars were shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pages 687–96 of Year Book No. 23.

Aborigines have been enumerated in all censuses of the Commonwealth, but the degree of coverage and information obtained has varied substantially since 1911. Since the census taken in 1933 the adequacy of the particulars obtained has improved progressively as a result of an increasing number of Aborigines coming into contact with more populated areas.

At the 1966 Census extensive arrangements were made to obtain as full a coverage of Aborigines as possible and to enumerate fully those Aborigines 'out of contact'. Throughout Australia the assistance of Aboriginal welfare bodies, mission superintendents, station owners, patrol officers, and police was sought in an effort to include all Aborigines and to obtain complete information about them, e.g. in the Northern Territory information was obtained from missions and settlements concerning Aborigines normally resident at such locations but who were absent at the time of the census, and of Aborigines resident at such locations but who normally resided elsewhere. The two sets of information were then reconciled to produce what is considered to be a fairly complete and accurate coverage of Aborigines in the Territory.

Selected characteristics

For details of certain selected characteristics derived from the 1966 Census *see* Year Book No. 56, pages 138–42. Details of all characteristics enumerated, together with details for States and Territories, and comparisons between the Aboriginal population and the total population, may be found in the publication *The Aboriginal Population of Australia* (2.23).

At censuses prior to the 1966 Census, the instructions relating to race were insufficient to enable respondents to classify themselves according to degree of race mixture. For example, from 1933 to 1961 persons were asked to state:

> 'For persons of European Race, wherever born, write "European". For non-Europeans state the race to which they belong, for example, "Aboriginal", "Chinese", "Negro", "Afghan", etc If the person is half-caste with one parent of European race, write also "H.C.", for example, "H.C Aboriginal", "H.C. Chinese", etc.'

At the 1966 Census the instructions were redesigned as follows in an endeavour to obtain precise data on race mixture and also to avoid the opprobrium attaching to the term 'half-caste':

> 'State each person's race. For persons of European race wherever born, write "European". Otherwise state whether Aboriginal, Chinese, Indian, Japanese, etc., as the case may be. If of more than one race give particulars, for example, ½ European—½ Aboriginal, ¾ Aboriginal—¼ Chinese, ½ European—½ Chinese.'

Investigations made by matching the replies of individuals at the 1961 and 1966 Censuses, and by comparing overall census results with data available from the State instrumentalities responsible for Aboriginal welfare, suggest that considerable doubt attaches to the validity of the replies given to the question on race at the 1966 and previous censuses.

It was concluded:

(*a*) that reporting by Aborigines in the 1966 Census was insufficiently precise to differentiate persons who are 50 per cent Aboriginal from those who are more than 50 per cent Aboriginal;

(*b*) that similar dissections obtained at censuses prior to the 1966 Census were similarly imprecise; and

(*c*) that even a total of all persons who are 50 per cent or more Aboriginal may be suspect, primarily because of the inclusion of persons who are less than 50 per cent Aboriginal and described themselves simply as 'Aboriginal', but also because of persons who are 50 per cent Aboriginal stating their race as 'European'.

Nevertheless, the statistics herein, which relate to persons who have described themselves as 50 per cent or more Aboriginal or simply as 'Aboriginal', are presented subject to these limitations.

The following table shows particulars of the Aboriginal population of Australia at the Censuses of 30 June, 1954, 1961, and 1966. Because of some doubt about the accuracy of separate figures for full-blood and half-blood Aborigines as shown in previous issues of the Year Book, their separate publication has been discontinued. Torres Strait Islanders are not included in this table, but are included in the census figures shown elsewhere in this chapter. At the 1966 Census they numbered 5,403 persons.

ABORIGINAL POPULATION(*a*): CENSUSES, 1954, 1961 AND 1966

	Census, 1954(a)			*Census, 1961(a)*			*Census, 1966(b)*		
State or Territory	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales	6,278	5,935	12,213	7,494	7,222	14,716	7,343	6,876	14,219
Victoria	691	704	1,395	899	897	1,796	856	934	1,790
Queensland	8,368	7,781	16,149	10,146	9,550	19,696	9,644	9,359	19,003
South Australia	1,675	1,537	3,212	2,607	2,277	4,884	2,914	2,591	5,505
Western Australia	6,564	6,135	12,699	8,351	7,925	16,276	9,505	8,934	18,439
Northern Territory	5,990	5,798	11,788	9,013	8,747	17,760	10,651	10,468	21,119
Australia(*c*)	**29,716**	**28,006**	**57,722**	**38,612**	**36,697**	**75,309**	**40,984**	**39,223**	**80,207**

(*a*) Prior to the 1966 Census, Aborigines 'out of contact' were not enumerated and estimates of these were made by authorities responsible for native welfare. It is estimated that at the 1954 Census 12,956 Aborigines (of which 2,311 were estimated to be in Queensland, 1,760 in South Australia, 3,516 in Western Australia and 5,369 in the Northern Territory) were not contacted by census collectors and were not included in the Census. Increasing numbers, however, were coming into contact and at the 1961 Census it is estimated that 2,000 Aborigines in Western Australia and 1,944 in the Northern Territory were not contacted by census collectors. At the 1966 Census, efforts were made to obtain complete coverage. (*b*) The figures relate to those persons who described themselves in the 1966 Census as being 50 per cent or more Aboriginal or simply as 'Aboriginal'. For reasons stated above, it has not been possible to differentiate between persons who are 50 per cent Aboriginal from those who are more than 50 per cent Aboriginal. (*c*) Includes Tasmania and the Australian Capital Territory.

1971 Census of Population and Housing

In view of the limitations on the statistics described above, an attempt was made for the 1971 Census to design a question which would obtain more meaningful data on the Aboriginal population. The advice of expert bodies approached was that such data would be obtained by asking each respondent to indicate the race to which he considered himself to belong.

In addition the repeal of Section 127 of the Constitution in 1967 removed the need for the question on racial origin to identify 'Aboriginal natives'. 'Aboriginal natives', the term used in the Constitution, was interpreted as those persons possessing more than 50 per cent Aboriginal blood.

The question at the 1971 Census read:

What is this person's racial origin?

(If of mixed origin indicate the one to which he considers himself to belong)
(Tick one box only or give one origin only)

☐ European origin

☐ Aboriginal origin

☐ Torres Strait Islander origin

☐ Other origin (give one only)..............................

The following table shows particulars of the Aboriginal population of Australia at the Census of 30 June 1971. The statistics for Aborigines are not on a comparable basis with those from previous Censuses (*see* above).

ABORIGINAL POPULATION: SECTION OF STATE, BY SEX, CENSUS 30 JUNE 1971

	Major Urban(a)			*Other Urban(a)*			*Rural(a)*			*Migratory(a)*			*Total*		
State or Territory	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales	2,967	2,988	5,955	4,636	4,644	9,280	4,066	3,786	7,852	13	1	14	11,682	11,419	23,101
Victoria	1,487	1,412	2,899	883	952	1,835	479	437	916	6	..	6	2,855	2,801	5,656
Queensland	1,251	1,354	2,605	3,482	3,710	7,192	7,569	7,041	14,610	4	3	7	12,306	12,108	24,414
South Australia	834	887	1,721	747	765	1,512	2,116	1,791	3,907	..	..	..	3,697	3,443	7,140
Western Australia	1,094	1,137	2,231	3,227	3,287	6,514	6,921	6,223	13,144	8	6	14	11,250	10,653	21,903
Tasmania	96	78	174	133	124	257	78	66	144	..	..	..	307	268	575
Northern Territory	..	..	..	2,029	1,975	4,004	9,656	9,592	19,248	1	..	1	11,686	11,567	23,253
Australian Capital Territory	46	36	82	..	..	..	90	76	166	..	..	..	136	112	248
Australia	**7,775**	**7,892**	**15,667**	**15,137**	**15,457**	**30,594**	**30,975**	**29,012**	**59,987**	**32**	**10**	**42**	**53,919**	**52,371**	**106,290**

(*a*) For definition of urban, rural, etc., *see* explanation given on pages 142-143.

Projections of the population

In projecting the population, assumptions have to be made regarding future fertility, mortality and immigration. These are made in the light of past trends and expected developments.

The method chosen for these projections is similar to the method used for the current estimates of the population except that hypothetical figures of births, deaths and net migration are used instead of recorded births, deaths and net migration.

The assumptions employed in the latest set of projections, and summaries of the results, are given below. They cover the years 1976 to 2011, taking 1976 as the base year.

Fertility. Projected age specific fertility rates rise slightly from the 1976 experience until 1984 and then remain constant.

Mortality. It was assumed that the 1970–72 age specific mortality rates would be constant for the duration of the projection except that infant mortality is assumed to decline by about 2 per cent per annum.

Migration. Immigrants are assumed to have the same fertility and mortality experience as the resident Australian population. The following table shows the projected population in the absence of overseas migration after 1976, and the population that would result from net immigration at the illustrative level of 50,000 persons a year with the age-sex composition of the net permanent and long term movement of the 5-year period ended 30 June 1975.

PROJECTED POPULATION OF AUSTRALIA: 1976 TO 2011

30 June—	*Excluding migration after 30 June 1976*	*Resulting from net immigration at the illustrative level of 50,000 persons after 30 June 1976*	*Including net immigration at the illustrative level of 50,000 persons a year after 30 June 1976*
	'000	'000	'000
1976 (provisional)	13,643	. .	13,643
1977	13,744	51	13,795
1978	13,842	102	13,945
1979	13,938	155	14,093
1980	14,035	209	14,244
1981	14,136	264	14,400
1991	15,223	867	16,090
2001	16,129	1,548	17,677
2011	16,760	2,299	19,059

Population of External Territories

Ordinances of the individual External Territories under the control of Australia provide for a census of the population to be taken on the day prescribed for the taking of a census in the Commonwealth of Australia. The following table shows the population of the Territories of Christmas Island, Cocos (Keeling) Islands and Norfolk Island, at the Census of 30 June 1971 and as estimated at 30 June 1973.

POPULATION: EXTERNAL TERRITORIES, 30 JUNE 1971 AND 1973

	Census 30 June 1971			*Estimate 30 June 1973*
Territory	*Males*	*Females*	*Persons*	*Persons*
Christmas Island	1,732	959	2,691	2,884
Cocos (Keeling) Islands	312	306	618	654
Norfolk Island	824	859	1,683	1,846

Further particulars concerning the Territories are given in the chapter The Territories of Australia.

International statistics of population

In the following tables the population, density, rate of growth, natural increase and infant mortality are shown in respect of all countries which had an estimated population of at least ten million persons in 1971, excepting for the group 'Oceania', which is treated in more detail. The source of these figures for all countries except Australia is the 1973 *Demographic Yearbook*, which is prepared and published by the Statistical Office of the United Nations. The tables include figures varying in reliability and accuracy, there being considerable variation in the quality of demographic statistics between countries, but this information has been shown to provide a guide as to the magnitude and trend of population movements in overseas countries.

Where the information available to the Statistical Office of the United Nations relates to only part of the population of a country, the population characteristic (e.g. rate of growth), or vital statistics rate (e.g. marriages), has been omitted from the tables, and this is indicated by a footnote.

For fuller particulars of the differences in the quality of the statistics and their reliability and for other qualifications, reference should be made to the detailed explanations contained in the *Demographic Yearbook* of the Statistical Office of the United Nations (*see* particularly Technical Notes on Statistical Tables and footnotes to the tables).

Population, rate of growth and density: world, continents and regions

In preparing the population figures shown below the Population Branch of the United Nations includes revisions made to the estimates from time to time as new data becomes available, for example, from a census. Adjustments for under-enumeration have also been made. Reference should be made to the description contained in the United Nations *Demographic Yearbook*, 1973 (pages 16-17), regarding the scheme of regionalisation.

POPULATION, DENSITY AND RATE OF INCREASE FOR THE WORLD AND CONTINENTS—SELECTED YEARS

(*Source:* United Nations *Demographic Yearbook*, 1973)

Continent and region	*Population*								
	Estimates of mid-year population (millions)						*Annual rate of increase 1965–73 (per cent)*	*Annual rate of increase 1970–73 (per cent)*	*Density (persons per square kilometre) 1973*
	1950	*1960*	*1965*	*1970*	*1972*	*1973*			
World total	**2,486**	**2,982**	**3,289**	**3,632**	**3,782**	**3,860**	**2.0**	**2.1**	**28**
Africa	**217**	**270**	**303**	**344**	**364**	**374**	**2.7**	**2.8**	**12**
Western Africa	64	80	90	101	107	110	2.6	2.7	18
Eastern Africa	62	77	86	98	103	106	2.6	2.7	17
Northern Africa	51	65	75	87	92	95	3.1	3.2	11
Middle Africa	25	29	32	36	38	38	2.2	2.3	6
Southern Africa	14	18	20	23	24	25	2.4	2.5	9
America	**328**	**412**	**460**	**511**	**533**	**545**	**2.1**	**2.2**	**13**
Northern America	166	199	214	228	233	236	1.2	1.3	11
Latin America	*162*	*213*	*246*	*283*	*300*	*309*	*2.9*	*2.9*	*15*
Tropical South America	84	112	130	151	160	165	3.0	3.1	12
Middle America	35	48	57	67	72	75	3.4	3.5	30
Temperate South America	27	33	36	39	41	41	1.8	1.8	10
Caribbean	17	21	23	26	27	28	2.3	2.2	116
Asia(*a*)	**1,355**	**1,645**	**1,833**	**2,056**	**2,154**	**2,204**	**2.3**	**2.3**	**80**
East Asia	*657*	*780*	*852*	*930*	*962*	*978*	*1.7*	*1.7*	*83*
Mainland Region	536	640	700	765	792	806	1.8	1.7	72
Japan	83	93	98	103	106	107	1.1	1.2	290
Other East Asia	38	47	54	61	64	66	2.5	2.4	254
South Asia	*698*	*865*	*981*	*1,126*	*1,191*	*1,225*	*2.8*	*2.9*	*77*
Middle South Asia	481	588	665	762	806	828	2.8	2.8	122
South East Asia	173	219	249	287	304	313	2.9	2.9	68
South West Asia	44	58	67	77	82	84	2.9	3.0	19
Europe(*a*)	**392**	**425**	**445**	**462**	**469**	**472**	**0.8**	**0.7**	**96**
Western Europe	122	135	143	149	151	151	0.7	0.6	152
Southern Europe	109	118	123	128	131	132	0.9	0.9	100
Eastern Europe	89	97	100	104	106	107	0.8	0.8	108
Northern Europe	72	76	79	81	82	82	0.6	0.6	50
Oceania	**12.6**	**15.8**	**17.5**	**19.4**	**20.2**	**20.6**	**2.1**	**2.2**	**2**
Australia and New Zealand	10.1	12.7	14.0	15.4	16.0	16.3	1.9	2.0	2
Melanesia	1.8	2.2	2.5	2.8	2.9	3.0	2.5	2.6	6
Polynesia and Micronesia	0.7	0.9	1.1	1.2	1.3	1.3	3.1	3.2	45
Union of Soviet Socialist Republics	**180**	**214**	**231**	**243**	**248**	**250**	**1.0**	**1.0**	**11**

(*a*) Excludes U.S.S.R. shown below.

Population, density, rate of growth, natural increase, and infant mortality of selected countries

Certain details of the population of the more populous countries within continental groups are shown in the following table. As explained above, reference should be made to the detailed comments contained in the United Nations *Demographic Yearbook*, 1973, regarding geographical units used, boundaries of areas, reliability of estimates, etc.

POPULATION, DENSITY, RATE OF INCREASE, NATURAL INCREASE AND INFANT MORTALITY—SELECTED COUNTRIES

(*Source:* United Nations *Demographic Yearbook*, 1973)

Country	*Population mid-year 1973 (thousands)*	*Density 1973 (persons per square kilometre)*	*Annual rate of increase 1970–73 (per cent)*	*Year*	*Natural increase (Rate per '000 population)*	*Infant mortality (Rate per '000 live births)*
Africa—						
Nigeria	59,607	65	2.7	1965–70	24.7	(*a*)
Arab Republic of Egypt	35,619	36	2.2	1971	21.7	103.3
Ethiopia	26,076	21	1.9	1965–70	20.6	84.2
South Africa	23,724	19	2.8	1965–70	23.7	(*a*)
Zaire	23,563	10	2.8	1965–70	21.7	104
Sudan	16,901	7	2.5	1965–70	30.5	93.6
Morocco	16,309	37	(*a*)	1965–70	33.0	149
Algeria	15,772	7	3.2	1965–70	32.2	86.3
Tanzania, United Republic of						
Tanganyika	13,969	15	2.7	1957	21–22	190
Zanzibar	403	164	2.2	1970	26.0	140
Kenya	12,482	21	3.6	1965–70	30.3	55.0
North America—						
United States of America	210,404	22	0.9	1973	5.6	17.6
Mexico	54,303	28	3.5	1965–70	34.3	60.9
Canada	22,125	2	1.2	1973	8.3	16.8
South America—						
Brazil	101,707	12	2.9	1965–70	28.3	(*a*)
Argentina	24,286	9	1.5	1968	12.4	59.6
Colombia	23,209	20	3.2	1965–70	34.0	52.9
Peru	14,912	12	3.2	1965–70	30.7	65.1
Venezuela	11,293	12	2.8	1965–70	33.1	49.7
Asia—						
China (excl. Taiwan Province)	814,279	85	1.7	1965–70	17.8	(*a*)
India	574,216	175	2.1	1965–70	26.1	139.0
Indonesia	124,602	84	(*a*)	1965–70	28.9	125.0
Japan	108,346	291	1.3	1973	12.8	11.7
Bangladesh	71,614	502	(*a*)	(*a*)	(*a*)	(*a*)
Pakistan	66,749	83	3.6	1968	24.0	124.0
Philippines	40,219	134	3.0	1965–70	32.7	67.9
Thailand	39,787	77	3.2	1965–70	32.4	22.5
Turkey in Asia	(*a*)	(*a*)	(*a*)	1967	25.0	153.0
Korea, Republic of	32,905	334	1.7	1965–70	24.6	(*a*)
Iran	31,298	19	3.0	1965–70	28.8	(*a*)
Burma	29,560	44	2.3	1965–70	22.9	195–300
Democratic Republic of Vietnam	22,481	142	2.0	1965–70	21.4	(*a*)
Vietnam, Republic of	19,367	111	1.8	1965–70	21.4	42.8
Afghanistan	18,294	28	2.3	1965–70	24.0	(*a*)
Democratic People's Republic of Korea	15,087	125	2.8	1965–70	27.6	(*a*)
Sri Lanka	13,249	202	1.9	1972	21.8	45.1
Nepal	12,020	85	(*a*)	1965–70	21.7	(*a*)
Europe—						
Germany—						
Federal Republic of (incl. West Berlin)	61,967	249	0.7	1973	−1.6	20.4
Democratic Republic of (incl. East Berlin)	16,980	157	0.2	1973	−3.1	16.0
United Kingdom	55,933	229	0.3	1973	1.9	17.5
Italy	54,888	182	0.8	1973	6.1	25.7
France	52,130	95	0.9	1973	5.7	12.9
Spain	34,857	69	1.1	1973	10.7	15.1
Poland	33,361	107	0.9	1972	9.4	28.5
Yugoslavia	20,956	82	1.0	1973	9.3	43.3
Romania	20,828	88	0.9	1973	8.3	38.2
Czechoslovakia	14,578	114	0.6	1973	7.3	21.2
Netherlands	13,438	329	1.0	1973	6.3	11.6
Hungary	10,411	112	0.2	1973	6.2	33.5
Oceania—						
Australia	13,132	2	1.6	1973	10.4	16.5
New Zealand	2,964	18	1.8	1973	12.0	16.2
Papua New Guinea	2,563	6	1.0	1965–70	25.0	(*a*)
U.S.S.R.—						
Union of Soviet Socialist Republics	249,749	11	1.0	1973	9.0	26.3

(*a*) Not available or information relates to a segment of a population only.

Overseas arrivals and departures

This section contains summary statistics of total overseas arrivals and departures and detailed statistics of permanent movement. For information on passengers in other categories, *see* Chapter 29, Cultural Activities, Recreation and Travel.

More detailed statistics of overseas arrivals and departures, covering country of residence, country of embarkation or disembarkation, mode of travel, month of arrival or departure, etc., are shown in the tables of Section II, Overseas Arrivals and Departures, of the annual bulletin *Demography* and for 1972 and later years, in an annual mimeographed bulletin *Overseas Arrivals and Departures*. Mimeographed bulletins are also issued monthly and quarterly.

Overseas arrivals and departures since 1941

Earlier issues of the Year Book contain tables showing the increase of population by net migration from 1861 to the latest date, while information about overseas arrivals and departures for individual years from 1901 is published in the annual bulletin *Demography* (*see also* Statistical Summary of this Year Book and, from 1972, in the mimeographed bulletin *Overseas Arrivals and Departures* (4.23)). Australian statistics of overseas arrivals and departures exclude aircraft and ships' crews, persons on pleasure cruises commencing and finishing in Australia on ships not then engaged in regular voyages and persons who pass through on the same ship or flight or who change flights without leaving the airport's transit area. The following table shows arrivals and departures since 1941, and refers to total movement irrespective of length of stay.

OVERSEAS ARRIVALS AND DEPARTURES, BY SEX: AUSTRALIA, 1941 TO 1974

	Total arrivals			*Total departures*			*Excess of arrivals over departures*		
Period	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1941–45(*a*)	35,422	28,503	63,925	30,097	26,019	56,116	5,325	2,484	7,809
1946–50(*a*)	398,507	303,413	701,920	180,779	168,057	348,836	217,728	135,356	353,084
1951–55	581,300	446,566	1,027,866	340,819	273,223	614,042	240,481	173,343	413,824
1956–60	695,445	568,652	1,264,097	481,235	377,840	859,075	214,210	190,812	405,022
1961–65	1,107,419	896,215	2,003,634	906,956	696,790	1,603,746	200,463	199,425	399,888
1966–70	2,299,254	1,592,832	3,892,086	2,007,981	1,340,297	3,348,278	291,273	252,535	543,808
1971	625,066	453,732	1,078,798	581,510	412,683	994,193	43,556	41,049	84,605
1972	608,730	501,940	1,110,670	597,765	485,059	1,082,824	10,965	16,881	27,846
1973	696,212	594,148	1,290,360	676,190	573,752	1,249,942	20,022	20,396	40,418
1974	809,372	687,157	1,496,529	762,293	647,115	1,409,408	47,079	40,042	87,121
1975	801.255	727,703	1,528,959	807,418	729,668	1,537,084	—6,163	—1,963	—8,126

(*a*) Excludes movements of defence personnel from September 1939 to June 1947.

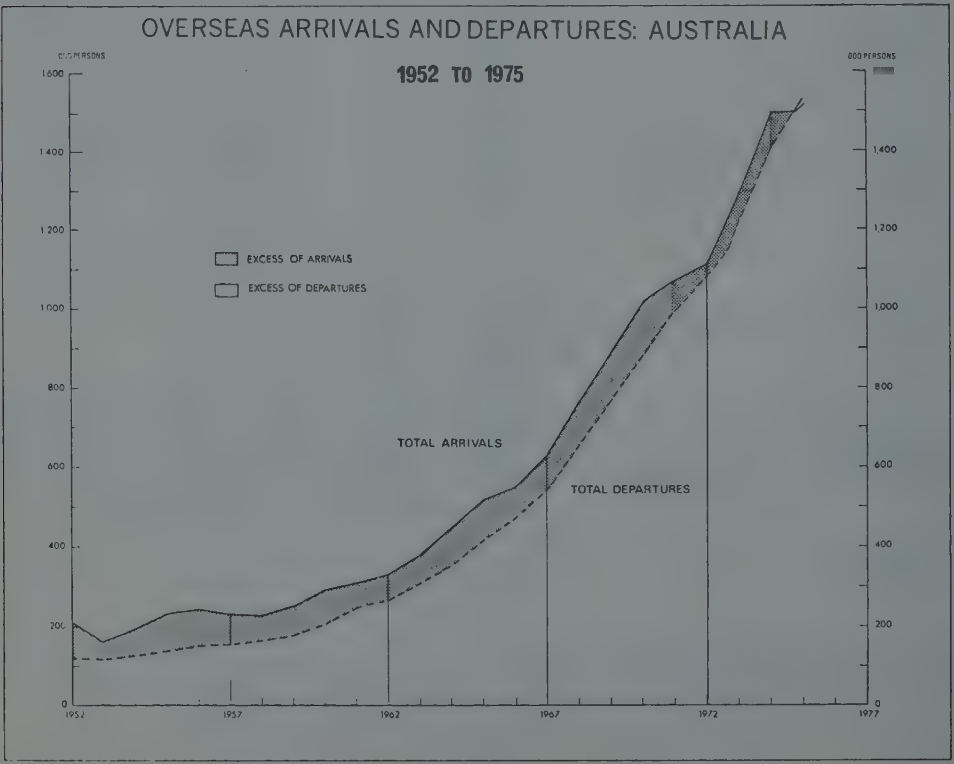


PLATE 27

Excess of arrivals over departures

The excess of total overseas arrivals over departures is one of the elements of population increase taken into account in preparing the estimated population for other than census dates (*see* pages 133 and 139 of this chapter). It is necessary to use statistics of total overseas arrivals and departures for this purpose, because Australian population statistics relate to the total population present in Australia at the date of the census or estimate, and not the population normally resident in Australia (which would include those temporarily overseas and exclude those temporarily visiting Australia).

EXCESS OF ARRIVALS OVER DEPARTURES, BY SEX: AGE AND MARITAL STATUS AUSTRALIA, 1973 AND 1974

Age and marital status	*1973*			*1974*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
AGE						
Age last birthday on arrival or departure—						
0– 4	2,070	1,565	3,635	4,626	5,167	9,793
5–14	4,269	4,331	8,600	7,098	8,933	16,031
15–24	6,042	4,670	10,712	10,954	9,839	20,793
25–44	6,937	7,588	14,525	20,495	12,058	32,553
45–64	400	1,744	2,144	3,227	5,761	8,988
65 and over	304	498	802	679	−1,716	−1,037
Total	**20,022**	**20,396**	**40,418**	**47,079**	**40,042**	**87,121**
MARITAL STATUS						
Never married—						
Under 15 years of age	6,339	5,896	12,235	11,724	14,139	25,863
15 years of age and over	4,946	3,766	8,712	11,197	5,043	16,240
Married	7,927	9,615	17,542	23,697	18,096	41,793
Widowed	−130	440	310	513	1,828	2,341
Divorced	940	679	1,619	−52	936	884
Total	**20,022**	**20,396**	**40,418**	**47,079**	**40,042**	**87,121**

Classification of travellers

Since 1 July 1924 overseas travellers have been classified into two principal categories, distinguishing movements for short terms from movements for longer periods (including permanently). Before 1957 these categories were classified as *temporary* and *permanent*. Thereafter the categories were entitled *short-term* and *permanent and long-term*, but the basis of classification was not changed and the figures are directly comparable for the whole period. For short-term travel, overseas visitors and Australian residents are identified separately.

Revised questions for travellers were introduced in mid-1958, and these enabled the separation, from 1 January 1959, of permanent from other long-term movements and also the identification among the permanent departures of former settlers departing. From 1 January 1974 further revisions to the questionnaire came into effect and, where they affect comparibility, they are described below.

The principal categories of overseas movement are as follows:

Permanent—consists of persons arriving with the stated intention of settling permanently in Australia (settlers), and Australian residents departing with the stated intention of residing permanently abroad; the latter include *former settlers*, i.e. persons who, on departure from Australia, stated that they had come to Australia to settle. Before 1974, former settlers were not so classified unless they had spent at least twelve months in Australia. The revised questionnaire has been designed to reduce the possibility of errors in classification and this distinction has now been removed.

Long-term—consists of the arrival of overseas visitors and the departure of Australian residents with the stated intention of staying (in Australia or abroad respectively) for twelve months or more; and the departure of visitors and the return of residents who have stayed (in Australia or abroad respectively) for twelve months or more. Until 1974, Australian residents were classified as long-term only if their time spent abroad included a period of twelve months in any one country. Their classification is now governed solely by their total absence from Australia.

Short-term—consists of all other movements, including the movement of Australian troops irrespective of period of stay, and U.S. troops who visited Australia on rest and recreation leave during the period October 1967 to December 1971.

This classification is based on statements made by the traveller on arrival in, or departure from, Australia. They represent the traveller's intention at that time. Many travellers subsequently change their intentions, and this must be borne in mind in interpreting the statistics.

The numbers so classified since 1 January 1946 are as follows.

OVERSEAS ARRIVALS AND DEPARTURES: CLASSIFICATION OF TRAVELLERS AUSTRALIA, 1946 TO 1974

ARRIVALS

Period	*Permanent and long-term movement*				*Short-term movement*				Total arrivals
	Permanent	*Long-term*		*Total permanent and long-term arrivals*	*Australian residents returning*	*Overseas visitors arriving*			
	Settlers arriving	*Australian residents returning*	*Overseas visitors arriving*			*In transit*	*Other*	*Total*	
1946–50 .	n.a.	n.a.	n.a.	457,988	108,736	n.a.	n.a.	135,196	701,920
1951–55 .	n.a.	n.a.	n.a.	570,090	216,949	77,825	163,002	240,827	1,027,866
1956–60 .	n.a.	n.a.	n.a.	615,767	309,611	84,206	254,513	338,719	1,264,097
1961–65 .	575,992	111,288	73,848	761,128	585,203	143,424	513,879	657,303	2,003,634
1966–70 .	804,063	180,741	122,405	1,107,209	1,298,500	207,379	1,278,998	1,486,377	3,892,086
1971 .	155,525	47,782	30,500	233,807	412,598	64,727	367,666	432,393	1,078,798
1972 .	112,468	54,278	26,559	193,305	490,962	77,592	348,811	426,403	1,110,670
1973 .	105,003	65,021	27,370	197,394	620,842	73,074	399,050	472,124	1,290,360
1974 .	121,324	63,320	26,984	211,628	752,218	78,166	454,517	532,683	1,496,529
1975 .	54,117	58,352	19,858	132,327	880,609	78,222	437,801	516,023	1,528,959

DEPARTURES

Period	*Permanent and long-term movement*						*Short-term movement*		Total depart-ures
	Permanent			*Long-term*		*Total permanent and long-term departures*			
	Former settlers departing	*Other residents departing*	*Total permanent departures*	*Australian residents departing*	*Overseas visitors departing*		*Australian residents departing*	*Overseas visitors departing*	
1946–50 .	n.a.	n.a.	n.a.	n.a.	n.a.	105,968	101,787	141,081	348,836
1951–55 .	n.a.	n.a.	n.a.	n.a.	n.a.	155,509	212,978	245,555	614,042
1956–60 .	n.a.	n.a.	n.a.	n.a.	n.a.	210,807	306,118	342,150	859,075
1961–65 .	48,491	33,989	82,480	189,526	63,593	335,599	593,119	675,028	1,603,746
1966–70 .	115,954	43,758	159,712	281,097	71,746	512,555	1,294,118	1,541,605	3,348,278
1971 .	29,449	11,673	41,122	67,699	21,433	130,254	413,917	450,022	994,193
1972 .	33,172	12,709	45,881	66,853	24,251	136,985	504,519	441,320	1,082,824
1973 .	30,325	13,105	43,430	64,964	21,506	129,900	638,141	481,901	1,249,942
1974 .	21,849	11,902	33,751	66,228	24,401	124,380	769,650	515,378	1,409,408
1975 .	18,315	10,769	29,084	66,405	23,327	118,816	911,815	506,454	1,537.084

Note. Further information on short and long term movement is shown in the Chapter Cultural Activites, Recreation and Travel.

Permanent movement

In the following paragraphs particulars are given of the *persons who on arrival in Australia stated that they came intending to settle*, and of *Australian residents who on their departure from Australia stated their intention of residing permanently abroad*, classified according to country of citizenship, occupation, age, marital status, and State or Territory of intended residence (arrivals) or of last residence (departures).

Country of Citizenship

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT COUNTRY OF CITIZENSHIP, AUSTRALIA, 1973 AND 1974

(Persons)

	1973				*1974*			
	Arrivals				*Arrivals*			
Country of Citizenship	*Assisted (a)*	*Other*	*Total*	*Departures*	*Assisted (a)*	*Other*	*Total*	*Departures*
Australia	403	2,755	3,158	12,809	664	2,289	2,953	10,520
Austria	236	88	324	179	298	145	443	102
Canada	65	1,511	1,576	841	32	1,865	1,897	463
Cyprus	2	706	708	8	13	1,100	1,113	11
Finland	220	47	267	176	219	60	279	138
France	693	253	946	358	733	239	972	280
Germany(*b*)	1,042	584	1,626	860	936	641	1,577	485
Greece	863	2,370	3,233	305	31	3,678	3,709	204
India	37	1,834	1,871	29	80	1,933	2,013	11
Ireland	1,012	519	1,531	581	918	1,159	2,077	460
Italy	1,776	1,238	3,014	764	1,749	1,357	3,106	798
Lebanon	35	2,871	2,906	20	1,123	1,828	2,951	18
Malaysia	1	445	446	77	22	714	736	39
Malta	1,204	851	2,055	347	1,416	646	2,062	366
Netherlands	668	348	1,016	810	806	420	1,226	621
New Zealand	14	4,253	4,267	3,115	9	3,545	3,554	1,560
Philippines	6	416	422	13	192	548	740	11
Portugal	658	516	1,174	64	491	480	971	44
Singapore	4	347	351	13	25	621	646	15
South Africa	184	635	819	172	237	761	998	134
Spain	1,188	216	1,404	203	1,270	209	1,479	113
Sri Lanka	25	1,739	1,764	10	73	1,533	1,606	14
Sweden	472	79	551	130	353	127	480	86
Switzerland	183	388	571	395	175	429	604	186
Turkey	1,439	1,173	2,612	57	1,405	1,755	3,160	63
United Kingdom(*c*)	27,969	18,574	46,543	16,143	25,637	28,399	54,036	14,381
United States of America	907	2,102	3,009	2,265	676	3,009	3,685	1,374
Yugoslavia	3,565	2,502	6,067	657	3,307	3,162	6,469	422
Other, including stateless	4,951	5,821	10,772	2,029	9,304	6,478	15,782	832
Total	**49,822**	**55,181**	**105,003**	**43,430**	**52,194**	**69,130**	**121,324**	**33,751**

(*a*) For details of assisted passage schemes *see* pages 165–6. (*b*) Comprises the German Democratic Republic and the Federal Republic of Germany. (*c*) Includes United Kingdom colonies in 1973.

Occupation

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT OCCUPATION AND SEX, AUSTRALIA, 1973 AND 1974

	1973				*1974*			
	Arrivals		*Departures*		*Arrivals*		*Departures*	
Occupation group	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
Professional, technical and related workers	4,822	3,348	2,444	1,762	6,742	4,582	1,711	1,238
Administrative, executive, and managerial workers	2,147	299	1,306	142	2,734	594	913	135
Clerical workers	1,724	5,084	801	2,516	1,687	6,234	511	1,889
Sales workers	1,481	719	710	422	1,562	909	537	346
Farmers, fishermen, hunters, timber getters, and related workers	700	31	312	10	757	60	173	11
Miners, quarrymen, and related workers	113	..	101	..	125	..	42	..
Workers in transport and communication	1,787	384	751	144	2,195	437	569	117
Craftsmen and production-process workers	13,195	1,783	5,052	571	14,502	2,551	3,688	435
Labourers(*a*)	3,566	..	1,377	..	4,020	771	1,012	34
Service (protective and other), sport, and recreation workers	1,454	2,846	609	599	1,770	2,146	490	464
Occupation inadequately described or not stated	1,965	399	370	66	2,908	3,056	475	363
Persons not in work force—								
Children and students	18,778	17,409	7,617	6,916	21,525	19,656	5,925	5,823
Others	1,535	19,434	815	8,017	1,238	18,563	759	6,091
Total	**53,267**	**51,736**	**22,265**	**21,165**	**61,765**	**59,559**	**16,805**	**16,946**

(*a*) Labourers (so described), not elsewhere classified and freight handlers, including waterside workers.

Age and marital status

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT, BY SEX AGE DISTRIBUTION, AND MARITAL STATUS, AUSTRALIA, 1974

Age last birthday on arrival or departure	*Arrivals*				*Departures*			
	Never married	*Married*	*Widowed or divorced*	*Total*	*Never married*	*Married*	*Widowed or divorced*	*Total*
				MALES				
0– 4	8,149	..	..	8,149	2,364	..	..	2,364
5–14	11,048	..	..	11,048	3,111	..	..	3,111
15–24	9,772	3,576	49	13,397	1,743	630	13	2,386
25–44	5,174	17,649	629	23,452	1,288	4,886	173	6,347
45–64	372	3,677	268	4,317	156	1,563	110	1,829
65 and over	190	927	285	1,402	85	516	167	768
Total	*34,705*	*25,829*	*1,231*	*61,765*	*8,747*	*7,595*	*463*	*16,805*
				FEMALES				
0– 4	7,527	..	..	7,527	2,288	..	..	2,288
5–14	9,971	17	..	9,988	3,102	6	..	3,108
15–24	7,143	7,724	73	14,940	1,422	1,473	31	2,926
25–44	3,234	16,182	637	20,053	643	4,943	233	5,819
45–64	342	3,653	1,255	5,250	109	1,388	413	1,910
65 and over	144	607	1,050	1,801	79	295	521	895
Total	*28,361*	*28,183*	*3,015*	*59,559*	*7,643*	*8,105*	*1,198*	*16,946*
				PERSONS				
0– 4	15,676	..	..	15,676	4,652	..	..	4,652
5–14	21,019	17	..	21,036	6,213	6	..	6,219
15–24	16,915	11,300	122	28,337	3,165	2,103	44	5,312
25–44	8,408	33,831	1,266	43,505	1,931	9,829	406	12,166
45–64	714	7,330	1,523	9,567	265	2,951	523	3,739
65 and over	334	1,534	1,335	3,203	164	811	688	1,663
Total	**63,066**	**54,012**	**4,246**	**121,324**	**16,390**	**15,700**	**1,661**	**33,751**

State or Territory of intended residence (arrivals) or last residence (departures). The following table shows the number of settlers arriving in Australia by State or Territory of intended residence and the number of Australian residents departing permanently by State or Territory of last residence, for the years 1972 to 1974. Settlers are asked, on or before arrival, their intended address in Australia. Their replies represent the settlers' intentions at the time and these may not be realised. Residents departing permanently are asked their State or Territory of residence. Before 1974, State or Territory of residence was defined as the State or Territory of intended or last residence for a period of twelve months or more. Period of residence is not now taken into account in the definition. The allocation to States and Territories in the table is based on their replies.

OVERSEAS ARRIVALS AND DEPARTURES—PERMANENT MOVEMENT SETTLERS ARRIVING AND RESIDENTS DEPARTING, BY STATE OR TERRITORY OF INTENDED RESIDENCE OR LAST RESIDENCE, 1972 TO 1974

(Persons)

State or Territory of intended residence or last residence	*Settlers arriving*			*Residents departing*		
	1972	*1973*	*1974*	*1972*	*1973*	*1974*
New South Wales	42,206	38,643	45,143	16,090	15,406	12,100
Victoria	28,573	27,012	31,904	8,775	8,673	8,244
Queensland	9,880	10,672	10,169	4,077	4,312	4,168
South Australia	10,406	10,269	10,164	4,224	3,939	3,812
Western Australia	14,128	11,839	17,510	5,863	4,580	3,596
Tasmania	1,056	1,161	1,524	665	608	513
Northern Territory	696	690	786	353	533	260
Australian Capital Territory	1,091	1,157	1,551	658	692	471
Not stated	4,432	3,560	2,573	5,176	4,687	587
Total	**112,468**	**105,003**	**121,324**	**45,881**	**43,430**	**33,751**

Former settlers and other residents departing permanently—country of intended residence. The principal countries of intended residence of persons departing permanently during the years 1973 and 1974 are shown in the following table for 'former settlers' and other residents.

OVERSEAS DEPARTURES—PERMANENT MOVEMENT
COUNTRY OF INTENDED RESIDENCE
AUSTRALIA, 1973 AND 1974

	1973			*1974*		
Country of intended residence	*Former settlers*	*Other residents*	*Total*	*Former settlers*	*Other residents*	*Total*
Austria	152	56	208	101	45	146
Canada	1,098	715	1,813	844	836	1,680
Denmark	217	39	256	97	39	136
Finland	143	16	159	121	25	146
France	354	81	435	207	117	324
Germany(*a*)	855	275	1,130	454	154	608
Greece	326	202	528	236	130	366
Hong Kong	102	141	243	40	116	156
Italy	778	388	1,166	725	344	1,069
Malta	292	82	374	288	84	372
Netherlands	803	287	1,090	534	243	777
New Zealand	4,640	4,413	9,053	2,844	4,207	7,051
Papua New Guinea	190	867	1,057	102	586	688
Singapore	131	169	300	29	116	145
South Africa	395	156	551	383	185	568
Spain	200	69	269	110	62	172
Sweden	148	33	181	84	19	103
Switzerland	372	74	446	173	70	243
United Kingdom and Ireland	15,028	2,780	17,808	11,732	2,438	14,170
United States of America	2,229	1,090	3,319	1,333	949	2,282
Yugoslavia	591	105	696	322	93	415
Other and not stated	1,281	1,067	2,348	1,090	1,044	2,134
Total	**30,325**	**13,105**	**43,430**	**21,849**	**11,902**	**33,751**

(*a*) Comprises the German Democratic Republic and the Federal Republic of Germany.

IMMIGRATION INTO AUSTRALIA

Powers and legislation of the Commonwealth Government

Under Section 51 (xix), (xxvii) and (xxviii) of the Commonwealth Constitution, the Commonwealth Parliament is empowered to make laws with respect to immigration, emigration, aliens and the influx of criminals. Immigration into Australia is regulated by the *Migration Act* 1958 which came into force on 1 June 1959.

Any immigrant entering Australia after the commencement of the Act without having been granted an 'entry permit' or who is not within an exempted class is a prohibited immigrant. Exempted persons include diplomatic, consular and trade representatives of other countries, and seamen who enter with leave while their ships are in Australian ports. For the purposes of the Migration Act an 'immigrant' includes a person entering for temporary stay.

An entry permit is normally granted at the port of entry by means of a stamp in the traveller's passport or equivalent travel document. Temporary permits are granted to visitors and persons whose stay is to be of limited duration. For other persons permits are issued without limitation as to stay. A person who is refused an entry permit must not be permitted (by the carrier company) to enter Australia; otherwise the carrier company is liable to a fine of $1,000.

The Act contains provision for the deportation of persons who enter Australia without an entry permit, who overstay their approved period of residence or who are convicted of crimes.

The *Aliens Act* 1947 provides that a register of aliens shall be maintained for every State and mainland Territory of Australia. Unless exempted, aliens 16 years of age and over entering or remaining in Australia are required to register as permanent residents. They are required to notify marriage within thirty days of marriage taking place. The Act provides also that consent must be obtained before an alien may change his or her surname.

For the purposes of the Aliens Act an 'alien' is a person 16 years of age and over who is not an Australian citizen, an Irish citizen, a person having the status of British subject, or a British or Australian protected person.

The Minister for Social Security is responsible for the administration of the *Immigration* (*Guardianship of Children*) *Act* 1946 and is the legal guardian of every person under the age of 21 years who enters Australia (except for certain exempted groups) other than in the charge of, or for the purpose of living in the care of, a parent or adult relative. It is primarily administered through the child welfare authorities in each State and mainland Territory who, as the Minister's delegates under the Act, supervise the welfare of each 'immigrant child'.

Department of Immigration and Ethnic Affairs

Functions of the Department of Immigration and Ethnic Affairs

The functions of the Department of Immigration include: administration of immigration policy; planning immigration programs; consideration of all applications for permanent and temporary residence; demographic studies; population policy; formulation of policy in relationship to international organisations and international conventions; Australian citizenship; deportation; prevention of illegal entry; and research into aspects of immigration and ethnic affairs.

Immigration Program 1976–77

The immigration program for 1976–77 has been set at 70,000 including some 30,000 financially assisted.

Immigration Policy

Australia's immigration policy is applied uniformly on a global basis: it is selective but not discriminatory.

Family reunion. Priority is given to the spouses, dependent children and aged or dependent parents of Australian residents. They are admitted provided they satisfy health and character requirements. Non-dependent parents of working age and their dependent children are admitted provided they are economically viable and satisfy normal health and character requirements. Fiancees and fiances may also be admitted. This is initially on a temporary residence basis.

Occupational categories. Persons with qualifications and experience in those occupations which are assessed as being in continuing strong demand in Australia may also be admitted. The list of approved occupations is kept under continuing review. It is confined at present to selected professional and skilled occupations. It is necessary for applicants or nominees to have an intention to settle permanently in Australia and they must also meet health and character requirements.

Assisted migration into Australia

Assisted passages are available to the spouses and dependent children of residents of Australia and to those persons (who may be accompanied by their families) possessing specifically listed skills or qualifications. Persons possessing such skills may be sponsored by residents of Australia or they may lodge direct applications overseas for entry and the grant of assisted passages.

Detailed statistics of assisted migration into Australia are shown in *Australian Immigration; Consolidated Statistics* and *Australian Immigration; Quarterly Statistical Summary.*

The following tables show total assisted migration since 1947 and arrivals under other assisted passage schemes and arrangements

ASSISTED MIGRATION: AUSTRALIA, 1947 TO 1975

Period	*Nominated and selected (assisted) arrivals*
1947–50	273,195
1951–55	275,241
1956–60	305,517
1961–65	337,132
1966–70	537,478
1971–75	290,882
1969	125,958
1970	134,428
1971	103,811
1972	63,710
1973	49,822
1974	52,194
1975	21,345

Details of the joint scheme of assisted immigration arrived at by agreement between the Commonwealth and State Governments, which operated from 1920 to 1939, were published in earlier issues of the Year Book (*see* No. 38, page 576). After the outbreak of hostilities in 1939 it was decided to discontinue the grant of assisted passages for the duration of the war. Details of assisted migration schemes which have operated since 1947 are shown in earlier issues of the Year Book (*see* No. 58, page 153).

UNITED KINGDOM ASSISTED PASSAGE AGREEMENT: NUMBER OF MIGRANTS(*a*) STATES AND TERRITORIES OF INTENDED RESIDENCE JANUARY 1947 TO JUNE 1975

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T. and N.T.*	*Cwlth*
January 1947 to June 1967	231,680	202,519	75,716	119,677	81,357	17,902	7,429	736,280
1967–68	16,297	11,929	4,639	8,384	13,034	1,196	398	55,877
1968–69	23,754	14,705	5,954	12,046	14,990	1,536	399	73,384
1969–70	22,583	13,448	5,843	11,515	13,955	1,268	423	69,035
1970–71	16,932	10,801	5,095	10,003	12,431	1,137	456	56,855
1971–72	14,345	8,692	4,662	7,477	8,737	598	323	44,834
1972–73	10,571	6,235	4,352	5,914	5,141	530	252	32,995
1973–74	7,070	5,520	3,055	4,807	3,731	536	274	24,993
1974–75	4,967	4,025	1,712	3,288	3,784	473	233	18,482
Total January 1947 to June 1975	**348,200**	**277,874**	**111,028**	**183,111**	**157,160**	**25,176**	**10,187**	**1,112,736**

(*a*) Includes child migrants.

ARRIVALS UNDER ASSISTED MIGRATION SCHEMES: AUSTRALIA, JANUARY 1947 TO JUNE 1975

Assisted migration scheme	*January 1947 to June 1970*	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*January 1947 to June 1975*
Austrian	21,305	440	227	183	231	193	22,579
Belgian	2,774	167	159	90	81	59	3,330
General Assisted Passage(a)	40,388	..	..	..	..	..	40,388
German	90,670	2,622	1,491	1,192	1,075	542	97,592
Greek	61,935	6,198	3,088	1,257	623	..	73,101
Italian	52,920	4,615	3,641	1,920	1,383	1,049	65,528
Maltese	40,692	1,048	904	1,130	1,430	787	45,991
Netherlands	78,311	1,724	1,223	598	801	478	83,135
Refugee	242,581	11,812	3,259	2,512	1,228	514	261,906
Spanish	10,258	1,013	856	856	1,148	378	14,509
Special Passage Assistance Programme(b)	50,753	22,578	15,918	10,449	13,816	11,585	114,818
Turkish	5,556	3,369	1,822	1,216	1,711	174	13,848
United Kingdom	934,576	56,855	44,834	32,995	24,993	18,482	1,112,735
Yugoslav	..	5,853	4,135	2,303	1,841	1,092	15,224
Other schemes	30,219	1,553	786	268	283	901	44,291
Total	**1,662,938**	**119,847**	**82,343**	**56,969**	**50,644**	**36,234**	**2,008,975**

(a) Mostly Scandinavians, U.S. Americans, and British nationals from countries other than the United Kingdom.
(b) Includes United States Passage Assistance Programme (U.S.P.A.P.).

Accommodation of migrants

Migrants must be assured of accommodation on arrival, unless they have sufficient funds to be independent. For those migrants nominated by relatives or friends this initial accommodation has usually been in private homes. Most of the assisted migrants nominated by the Commonwealth Government are provided with transitory accommodation in migrant hostels operated by Commonwealth Hostels Ltd, a non-profit making Government-sponsored company. These hostels provide a range of services to help migrants to settle in Australia including child minding centres, English language classes, youth recreation activities, welfare officers and assistance in obtaining permanent accommodation.

The total capacity of hostels is about 11,000. A further 2,000 migrants nominated by the Commonwealth Government can be accommodated in self-contained flats. Hostel accommodation is available to families for up to 12 months, while tenancies of flats are limited to six months. Childless couples and single persons are accepted in hostels for up to six months and three months respectively. Extensions of stay are granted in extenuating circumstances.

British assisted migrants nominated by State Governments are provided with initial accommodation in reception centres operated by the State authorities. The Commonwealth Government contributes to the capital cost of these establishments on a dollar for dollar basis.

The Australian Population and Immigration Council

The Australian Population and Immigration Council was originally established in February 1975 and was reconstituted by the Minister for Immigration and Ethnic Affairs in March 1976.

The reconstituted Council advises the Minister on such matters as: (i) regular monitoring of, and research into, population change; (ii) major developments and research in Australia and overseas concerning population and immigration; (iii) longer-term implications of changing patterns of immigration intakes; (iv) ways in which future immigration intakes can be planned to complement other policies, and implications of population change for various aspects of resource allocation.

National Population Inquiry

The National Population Inquiry was set up in 1970 to advise on the likely composition and distribution of Australian population at various stages up to the end of the twentieth century. The Inquiry's first Report was published in 1975. It indicated that the rate of natural increase in Australia was declining and in particular, that fertility was likely to remain close to replacement level for the foreseeable future. Consequently, Australia's population growth is likely to be lower in the future, than in the recent past.

Committee on Overseas Professional Qualifications

The Committee on Overseas Professional Qualifications was established in 1969. It is serviced by a permanent secretariat and works in close co-operation with the various professional and registering authorities responsible for the assessment and recognition of professional qualifications. It assists them by information and advice on the comparability of overseas qualifications with Australian standards.

Passports

Australian passports are issued under the *Passports Act* 1938 and Passport Regulations. Applicants for passports must furnish evidence of their identity and citizenship and pay a fee of twenty dollars. Approximately 370,000 Australian passports are issued each year in Australia and abroad.

Citizenship

Legislation

The *Nationality and Citizenship Act* 1948 which came into force on 26 January 1949 created the status of 'Australian citizen'. On 4 June 1969 the Act became the *Citizenship Act* 1948. On 1 December 1973 the Act became the *Australian Citizenship Act* 1948.

Australian citizenship may be acquired (*a*) by birth in Australia, (*b*) by descent through birth abroad to Australian parents subject to registration of the birth at an Australian Consulate, and (*c*) by grant of citizenship to persons resident in Australia under the conditions prescribed in the Act.

The effect of the amendment to the legislation in 1973 was that all persons are now eligible for the grant of Australian citizenship on the same basis provided that they have lived in Australia for at least three years, are of good character, have an adequate knowledge of English and of the responsibilities and privileges of citizenship, and that they declare their intention to reside permanently in Australia.

The Act recognises the independence of married women. Australian citizenship is not lost solely by marriage to another national nor do women automatically acquire Australian citizenship upon marriage to an Australian citizen. Wives of Australian citizens are exempted from the three year residential requirement when applying for the grant of Australian citizenship.

PERSONS GRANTED AUSTRALIAN CITIZENSHIP

Previous nationality or citizenship	*Year ended 30 June 1975*	*January 1945—June 1975(a)*
Albanian	4	1,195
Argentinian	149	503
Australian protected persons	43	2,616
Austrian	342	11,696
Bangladesh	30	85
Belgian	112	1,516
Bolivian	5	44
Brazilian	36	160
British protected persons	10	129
British without citizenship	..	260
Bulgarian	22	1,461
Burmese	442	1,823
Canadian	87	831
Chilean	340	648
Chinese	547	9,560
Colombian	28	65
Costa Rican	7	25
Cuban	14	46
Cypriot	470	5,224
Czechoslovak	738	15,795
Danish	187	3,268
Dutch	1,090	80,310
Ecuadorian	26	56
Egyptian	1,327	8,372
Estonian	19	6,177
Fijian	125	569
Filipino	304	1,411
Finnish	312	4,117
French	611	4,296
German	1,407	56,234
Greek	11,748	105,606
Guyanan	2	29
Hungarian	350	33,386
Icelandic	6	44
Indian	1,489	14,996
Indonesian	104	588
Iranian	82	487
Iraqi	337	1,368
Irish	266	2,414
Israeli	214	5,541
Italian	5,012	172,008
Jamaican	25	74
Japanese	32	909
Jordanian	222	1,256
Kenyan	19	184
Korean	44	147
Latvian	54	18,430
Lebanese	4,155	17,201
Lithuanian	25	8,841
Malaysian	510	3,542
Maltese	392	5,712
Mauritian	502	2,967
Mexican	9	24
Moroccan	20	73
New Zealander	122	2,602
Norwegian	39	1,510
Pakistani	134	768
Peruvian	60	158
Polish	643	73,325
Portuguese	271	1,516
Rhodesian	25	563
Romanian	42	3,394
Russian	124	12,384
Singaporean	329	1,610
South African	534	5,259
Spanish	610	4,269
Sri Lankan	968	8,589
Stateless	413	17,321
Sudanese	77	265
Swedish	73	1,016
Swiss	341	3,333
Syrian	416	1,234
Tanzanian	16	85
Thai	23	145
Tongan	13	64
Trinidad and Tobago	53	243
Tunisian	2	25
Turkish	308	1,319
Ugandan	48	110
Ukrainian	30	20,526
United Kingdom and colonies	10,710	113,891
U.S. American	304	2,793
Uruguayan	390	604
Venezuelan	7	76
Vietnamese	26	186
West Indian	..	23
Yugoslav	5,355	68,879
Zambian	3	42
Others	71	319
Total	**57,033**	**962,765**

(*a*) Prior to July 1961, children of British subjects granted Australian citizenship were not included.

Settlement services

Migrant welfare, settlement and integration

The Department of Social Security provides direct assistance to migrants through its migrant welfare field staff and the Telephone Interpreter Service and indirect help through support to voluntary agencies.

The migrant welfare field staff consist of an establishment of 32 professional social workers and 62 trained welfare officers of whom 48 have competency in languages other than English. They are deployed throughout all capital cities and some other centres and work in association with local government authorities and voluntary organisations. This staff provides migrants with information and advice, counselling concerning personal problems, and referral to relevant authorities and agencies for relief or treatment.

In addition to direct services to migrants, the Department administers a grant scheme whereby financial assistance is provided to selected community welfare agencies to enable them to employ qualified social workers to help migrants overcome settlement problems. The scheme was designed to supplement the services of the Department by taking assistance to metropolitan areas where migrants were concentrated and to regional areas which could not readily be covered by the Department's social work service. The scheme also recognised the increasing involvement of voluntary agencies (the majority of which had limited financial resources) in providing assistance to migrants in need. Of 60 grants available under the scheme subject to availability of funds, 50 had been allocated by the end of June 1975. Forty-six agencies had been approved to receive grants, and 45 social workers were employed.

The Telephone Interpreter Service which was established in Sydney and Melbourne in February 1973, and Perth in March 1974, was extended to Brisbane in November 1975 and Adelaide in December 1975. The Service is designed to help overcome communication problems by providing a general interpreting, information and advisory service to migrants. The telephone interpreters are supported by contract 'on call' interpreters who are provided by the Department to assist with 'on the spot' interpreting in such places as hospitals and clinics, lawyers' offices and courts, schools, State Housing Commissions, etc. During the financial year ending June 1975, 34,029 calls were received at the Sydney centre, 30,542 at Melbourne and 9,471 at Perth.

The ethnic communities, through their own organisations, ease the strain and play a major role in the resettlement process. The Department has published a directory of ethnic organisations for each State and has distributed copies free of charge to all interested persons and relevant institutions. Systematic updating is maintained with the aid of a computer which is to be linked with a foreign language information distribution service.

Sociological research is undertaken into the ethnic, cultural and historical background of individual national groups, the history of their migration to Australia, their residential distribution and their economic, cultural and scientific contribution to Australia. Other areas of concern are certain social and medical conditions of migrants, e.g. discrimination against newcomers, the incidence of crime, mental illness, alcoholism and tuberculosis.

A team of psychologists and support staff undertakes surveys and other research into migrant integration and welfare in Australia and migrant selection overseas. Important areas of this research are studies of the general background, motivation and post-arrival experiences of immigrants generally and of particular groups. Studies are also undertaken on aspects of more general relevance to the integration of migrants and their welfare and adjustment. The information gained facilitates the evaluation of current programs and policies bearing upon the settlement and integration of immigrants in Australia and their selection and counselling overseas.

Eight Good Neighbour Councils in the six States and two Territories of Australia operate as autonomous voluntary organisations with the many community groups and people throughout Australia whose common objective is to assist migrants to integrate. In certain instances Councils offer direct services to migrants and are financially sponsored by grants from the Commonwealth Government. From 1 January 1974 these grants enabled the Councils to pay the administrative costs involved in maintaining central offices in the capital cities, ten regional offices and five sub-offices as well as employing 78 staff members. The Councils worked with more than 972 organisations and controlled a network of more than 600 branches and representatives in regional centres.

Migrant education

Migrant education services are available without cost to assist migrants overcome language problems and settle effectively into the Australian community. Authority for these activities derives from the *Immigration (Education) Act* 1971, responsibility for which was assumed by the Department of Education under new administrative arrangements in June 1974.

Under the adult program instruction is provided in source countries before embarkation, on board ship and after arrival in Australia, in migrant hostels and in the community generally. There is a wide range of part-time and full-time courses which include accelerated and intensive instruction, television and radio programs and a number of special courses catering for migrant workers in industry, women (including a one-to-one instruction scheme using voluntary tutors for migrant women in the home) and other individual categories of migrants. Migrants attending full-time courses are paid a living allowance to maintain themselves and their families.

Under the child program, provision is made for teachers, equipment and materials for special English classes for migrant children in government and non-government schools and training courses are arranged for the special teachers employed under the program. At 31 December 1976 there were 92,600 migrant children receiving language instruction in special classes, 2,197 special teachers were employed and 1,278 schools involved in the program. As from 1 January 1976 the Schools Commission assumed responsibility for funding of the special program for migrant children. Responsibility for policy development and co-ordination of the program has remained with the Department of Education in consultation with the Schools Commission.

The emergency classroom accommodation program for migrant children which was introduced in 1973 will phase out in 1976. Over this period 411 single unit classrooms will have been provided at a cost of $6,825,000.

A network of migrant education centres in capital cities provides a focal point for migrant education in the States and Territories. These centres are equipped with classrooms, language laboratories and teaching aids and provide also the administrative headquarters for the State Government authorities involved in the migrant education program.

Work continued on three major commissioned research projects in the child migrant education field. Two of these projects, a study of the educational experience, aspirations and achievement of migrant children, and a longitudinal study of the educational problems and coping behaviour of newly arrived migrant children, are being sponsored by the Academy of Social Sciences. The third project is being undertaken by the Australian Council for Educational Research and is aimed at developing a wide range of tests and allied devices for practical use by classroom teachers in assessing the English language skills and needs of migrant children. Each project will be completed in 1976–77 and total costs will be of the order of $500,000. Expenditure in 1975–76 is expected to be $189,000. An evaluation of Intensive English Language Courses for professionally qualified migrants was commenced in 1975–76 by the Research Branch of the Department of Education. In 1975–76 reports were published of two migrant education research studies completed in the previous year: a collaborative Federal-State inquiry into schools of high migrant density, and a commissioned research study of the educational abilities and achievement of migrant children in Victorian schools.

Internal migration

In May 1974 and February 1975 surveys were conducted in conjunction with the quarterly population survey (*see* the chapter Employment and Unemployment) in order to obtain information about the movement within Australia of persons who had been resident in Australia twelve months before. For the May 1974 survey, persons were classified as having moved if the address of their usual place of residence on 30 April 1974 was different from that on 1 May 1973 and both places were in Australia. For the February 1975 survey, the corresponding dates were 31 December 1974 and 1 January 1974. No information was obtained about the number of different changes made between these dates. Persons who were usually resident at the same address on both dates, but who had moved away and had returned during this period were regarded, for the purposes of the survey, as not having moved.

A Summary of the results of the survey conducted in February 1975 is shown below.

The table of standard errors and the comments on the reliability of estimates given in the chapter Employment and Unemployment are also applicable to this survey.

Further details of the survey conducted in February 1975 and results of the May 1974 survey were published in *Internal Migration, Years ended April* 1974 *and December* 1974 (4.26). Details of earlier surveys of internal migration were published in *Internal Migration*, 1969–70 to 1972–73 (4.26).

NON-INSTITUTIONAL CIVILIAN POPULATION AGED 15 YEARS AND OVER(*a*) CHANGE OF USUAL RESIDENCE, JANUARY TO DECEMBER 1974

	Males	*Females*	*Persons*	
	('000)	*('000)*	*('000)*	*Per cent of total*
Changed usual place of residence—				
Within the same State or Territory	608.3	583.3	1,191.6	12.7
Moved to another State or Territory	74.5	76.8	151.3	1.6
Total	*682.8*	*660.1*	*1,342.9*	*14.3*
Did not change usual place of residence	3,980.7	4,063.9	8,044.6	85.7
Total	**4,663.5**	**4,723.9**	**9,387.5**	**100.0**

(*a*) Resident in Australia on 1 January 1974 and 31 December 1974. Excludes persons resident in Darwin in February 1975. Because of the effects of cyclone Tracy, the population survey was not conducted in Darwin in February 1975. It is estimated that at the time of the survey about 12,000 males and 5,000 females aged 15 years and over were living in Darwin.

PERSONS WHO CHANGED THEIR USUAL RESIDENCE(*a*), BY TYPE OF MOVE JANUARY TO DECEMBER 1974

('000)

	To capital city(b)		*To other area*		*Total movers*		
From	*In same State*	*In another State*	*In same State or Territory*	*In another State or Territory*	*Intrastate*	*Interstate*	*Total*
			MALES				
State capital city(*b*)	339.4	22.4	38.8	15.1	378.1	37.5	415.6
Other area	34.6	16.7	195.6	20.3	230.2	37.0	267.1
Total	*374.0*	*39.1*	*234.3*	*35.4*	*608.3*	*74.5*	*682.8*
			FEMALES				
State capital city(*b*)	343.2	23.7	35.5	16.6	378.6	40.2	418.8
Other area	32.1	13.9	172.6	22.6	204.7	36.6	241.2
Total	*375.2*	*37.6*	*208.1*	*39.2*	*583.3*	*76.8*	*660.1*
			PERSONS				
State capital city(*b*)	682.5	46.1	74.2	31.6	756.7	77.8	834.5
Other area	66.7	30.6	368.2	42.9	434.8	73.5	508.4
Total	**749.2**	**76.7**	**442.4**	**74.6**	**1,191.6**	**151.3**	**1,342.9**

(*a*) Non-institutional civilians aged 15 years and over, excluding persons resident in Darwin. *See also* note (*a*) to previous table. (*b*) Statistical Divisions of the six State capital cities, as defined for the *Census of Population and Housing*, 30 *June* 1971, *see* pages 142–3.

PERSONS WHO CHANGED THEIR USUAL RESIDENCE(*a*), BY TYPE OF MOVE, JANUARY TO DECEMBER 1974

('000)

Type of move	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
From address in State capital city(*b*)—									
To another address in same capital city	233.4	226.3	71.0	71.0	68.5	12.3	..	..	682.5
To elsewhere within same State	23.5	17.5	14.1	7.5	10.3	*	..	..	74.2
To another State or Territory	26.0	21.7	12.6	9.2	5.6	2.8	..	..	77.8
To address in State capital city(*b*)—									
From elsewhere within same State	16.1	16.2	16.3	6.2	10.4	*	..	..	66.7
From another State or Territory	20.7	18.1	13.7	8.0	12.7	3.4	..	..	76.7
Net gain (+) or loss (−), State capital cities	*—12.7*	*−4.9*	*+3.4*	*−2.5*	*+7.3*	*	..	..	*−8.6*
From address not in State capital city(*b*)—									
To another address outside State capital city, in same State or Territory	134.5	57.6	95.5	16.3	28.0	18.6	6.5	11.1	368.2
To capital city of same State	16.1	16.2	16.3	6.2	10.4	*	..	..	66.7
To another State or Territory	26.0	10.4	14.6	3.8	3.6	3.1	6.2	5.9	73.5
To address not in State capital city(*b*)—									
From capital city of same State	−23.5	17.5	14.1	7.5	10.3	*	..	..	74.2
From another State or Territory	15.0	10.3	19.2	3.5	4.6	3.9	5.7	12.3	74.6
Net gain (+) or loss (−), areas outside State capital cities	*	*	*	*	*	*	*	*+6.4*	*+8.6*
Total net gain (+) or loss (−)	**−16.3**	*	**+5.7**	*	**+8.2**	**+1.6**	*	**+6.4**	..

(*a*) *See* note (*a*) to previous table. (*b*) *See* note (*b*) to previous table.

* Subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction, they should not be regarded as reliable.

CHAPTER 8

VITAL STATISTICS

The tables in this chapter are confined to the principal characteristics of vital statistics for Australia and relate, in the main, to the year 1974 for marriages and divorces, 1973 and 1974 for births and 1973 for deaths and infant deaths. Comparisons have been restricted, in general, to the individual years 1970 to 1974 and the five year periods 1946–50 to 1966–70, while age data have been shown in five-year groups. Comparisons over longer periods, together with more detailed figures such as single age particulars and cross-classifications of various characteristics, were published in the annual bulletins, *Demography* (4.9) and *Causes of Death* (4.7). Current information is published in the *Monthly Review of Business Statistics* (1.4), the mimeograph bulletins *Births* (4.4), *Deaths* (4.8), *Marriages* (4.10), *Divorce* (13.1) (annual) and *Vital and Population Statistics* (quarterly) (4.11).

In most tables the statistics of births, deaths and marriages exclude particulars of full-blood Aborigines for years before 1966. Differences between the statistics now published and those formerly published which implied exclusion of Aboriginal vital events cannot be taken as reliable statistics of births, deaths, or marriages among full-blood Aborigines, because in many areas no satisfactory administrative or other basis existed for distinguishing vital events of full-blood Aborigines from those of part-Aborigines or the rest of the population.

Birth, death and marriage rates for certain countries of the world are set out in International Vital Statistics at the end of this chapter.

Provisions for registration and compilation of statistics

In Australia, statistics of births, deaths and marriages are compiled from information supplied for the registration of the event. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths, and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853, and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration having been taken over from South Australia in 1911 in respect of the Northern Territory and from New South Wales in 1930 in respect of the Australian Capital Territory. The authority responsible for the registration of births, deaths, and marriages occurring within his particular State or Territory is the Registrar-General (the Government Statist in Victoria) or the Principal Registrar.

The statistics of births, deaths and marriages in this chapter refer to events registered by the State and Territorial registrars during the year shown. There is usually an interval of at least several days between the occurrence and the registration of an event. As a result of the delay in registration some events occurring in one year are not registered until the following year. Events which are registered more than ten years after date of occurrence are excluded from the statistics.

For tables showing statistics of births, deaths and marriages for the States and Territories, figures are compiled from registrations of events which took place in each State and Territory. Some events take place in States other than the State in which the persons concerned (e.g. mother, deceased, bride/groom) usually resided. The effect of such interstate registrations on State totals however is slight. *See* page 181.

Statistics of divorce are compiled from petitions filed with and decrees granted by the Supreme Court of a State or Territory.

Marriages

The *Marriage Act* 1961–1966 came into operation on 1 September 1963, placing the marriage laws of all States, the mainland Territories and Norfolk Island on a uniform basis. Provision is made for the celebration of marriage by ministers of religion registered with the Registrar of Ministers of Religion appointed in each State and Territory by the Attorney-General, and by certain civil officers, in most cases district registrars. In each State or Territory the authorised celebrant is required to register particulars of the parties married with the appropriate registering authority as soon as practicable and in any case not later than fourteen days after the marriage.

The minimum marriageable age at which a person is legally free to marry is 18 years for males and 16 years for females. The marriage of a female between 16 and 18 years of age is not permissible without the consent of her parents or guardians or, where this is not obtainable of a magistrate or other prescribed authority. A judge or magistrate may, in exceptional circumstances, make an order authorising a male who has attained 16 years or a female who has attained 14 years to marry a person of marriageable age.

Numbers of marriages and crude marriage rates

MARRIAGES(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1946–50	30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951–55	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
1956–60	28,432	20,422	10,254	6,517	5,145	2,573	190	321	73,854
1961–65	31,788	23,262	11,437	7,514	5,768	2,700	248	533	83,250
1966–70	39,216	29,481	14,717	9,920	8,147	3,330	394	983	106,188
Annual total—									
1970	42,928	31,729	16,082	10,864	9,227	3,535	501	1,200	116,066
1971	43,038	32,386	16,538	10,833	9,382	3,578	485	1,397	117,637
1972	41,520	31,206	16,066	10,829	9,120	3,426	490	1,372	114,029
1973	40,722	30,203	16,490	10,806	9,102	3,395	513	1,469	112,700
1974	39,327	29,708	16,086	10,769	9,295	3,567	566	1,355	110,673

(*a*) Excludes particulars of full-blood Aborigines before 1966.

CRUDE MARRIAGE RATES(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1946–50	9.90	9.72	9.41	9.87	10.01	9.56	9.39	9.36	9.77
1951–55	8.41	8.34	7.91	8.11	8.44	8.35	9.13	8.20	8.29
1956–60	7.70	7.50	7.14	7.26	7.36	7.69	8.63	7.51	7.50
1961–65	7.86	7.64	7.27	7.42	7.43	7.49	8.09	7.26	7.63
1966–70	8.96	8.84	8.49	8.82	8.87	8.76	5.81	8.68	8.81
Annual rate—									
1970	9.48	9.20	8.96	9.38	9.28	9.11	6.32	9.10	9.26
1971	9.33	9.23	9.03	9.21	9.09	9.15	5.60	9.68	9.20
1972	8.89	8.78	8.58	9.10	8.63	8.71	5.26	8.67	8.78
1973	8.64	8.40	8.59	8.99	8.49	8.55	5.35	8.69	8.56
1974	8.26	8.15	8.17	8.82	8.46	8.88	5.56	7.52	8.27

(*a*) Number of marriages per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1966.

Previous marital status

In most years about ninety per cent of grooms and brides are single at marriage, seven per cent divorced and three per cent widowed.

PREVIOUS MARITAL STATUS OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1974

Previous marital status of bridegrooms	*Previous marital status of brides*			*Total bridegrooms*
	Spinsters	*Widows*	*Divorced*	
Bachelors	92,367	1,118	4,387	97,872
Widowers	714	1,685	968	3,367
Divorced	4,950	961	3,523	9,434
Total brides	**98,031**	**3,764**	**8,878**	**110,673**

Age and previous marital status at marriage

There were 18,171 males under 21 years of age married during 1974, while the corresponding number of females was 50,312.

AGE AND PREVIOUS MARITAL STATUS OF BRIDEGROOMS AND BRIDES AUSTRALIA, 1974

Age at marriage (years)	*Bridegrooms*				*Brides*			
	Bachelors	*Widowers*	*Divorced*	*Total*	*Spinsters*	*Widows*	*Divorced*	*Total*
Under 20	8,472	..	..	8,472	34,733	7	13	34,753
20–24	57,814	18	227	58,059	49,268	107	787	50,162
25–29	22,471	81	1,863	24,415	9,853	263	2,414	12,530
30–34	5,300	99	2,009	7,408	2,314	235	1,848	4,397
35–39	1,719	147	1,490	3,356	836	276	1,140	2,252
40–44	904	191	1,173	2,268	362	369	934	1,665
45–49	536	380	1,027	1,943	252	485	845	1,582
50–54	301	483	780	1,564	159	556	487	1,202
55–59	152	501	455	1,108	113	499	237	849
60–64	112	516	217	845	69	454	111	634
65 and over	91	951	193	1,235	72	513	62	647
Total	**97,872**	**3,367**	**9,434**	**110,673**	**98,031**	**3,764**	**8,878**	**110,673**

RELATIVE AGES OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1974

Age of bridegroom (years)	*Age of bride (years)*								*Total bridegrooms*
	Under 15	*15–19*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45 and over*	
Under 20	9	7,001	1,389	63	7	1	2	..	8,472
20–24	7	23,300	32,074	2,345	267	44	15	7	58,059
25–29	2	3,800	13,525	5,766	1,023	230	57	12	24,415
30–34	2	490	2,376	2,704	1,263	400	116	57	7,408
35–39	..	94	535	997	861	514	227	128	3,356
40–44	..	33	162	375	522	466	381	329	2,268
45–49	..	8	65	181	264	332	399	694	1,943
50–54	..	6	19	62	114	177	267	919	1,564
55–59	..	..	9	22	52	56	126	843	1,108
60–64	..	..	3	10	14	21	54	743	845
65 and over	..	1	5	5	10	11	21	1,182	1,235
Total brides	**20**	**34,733**	**50,162**	**12,530**	**4,397**	**2,252**	**1,665**	**4,914**	**110,673**

The median age at marriage of brides and bridegrooms has declined during recent years. The median ages, in years, of brides for each of the five years to 1974 were: 1970, 21.46; 1971, 21.39; 1972, 21.41; 1973, 21.41 and 1974, 21.37. The median ages, in years, of bridegrooms were: 1970, 23.74; 1971, 23.78; 1972, 23.80; 1973, 23.85; and 1974, 23.83. The difference in the median age at marriage between brides and bridegrooms is generally about two years, the difference in 1974 being 2.46 years. The median age is the age at which half of the bridegrooms or brides were younger and half were older than that age. It gives a better indication of the most common age at marriage than the mean age.

Countries of birth of persons marrying

RELATIVE COUNTRIES OF BIRTH OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1974

	Country of birth of bride											
Country of birth of bridegroom	*Australia*	*New Zealand*	*United Kingdom and Ireland*	*Germany*	*Greece*	*Italy*	*Malta*	*Netherlands*	*Yugoslavia*	*Other European*	*Other and unspecified*	*Total bridegrooms*
Australia	73,898	482	4,939	534	85	306	193	547	101	483	1,415	82,983
New Zealand	896	139	103	9	1	4	2	13	..	15	37	1,219
United Kingdom and Ireland	6,741	111	2,137	110	14	48	39	106	27	108	345	9,786
Germany	983	16	129	136	3	8	3	21	8	73	82	1,462
Greece	367	8	33	..	1,250	10	3	3	10	13	107	1,804
Italy	1,491	12	105	23	12	1,252	20	8	25	46	108	3,102
Malta	419	1	43	6	1	9	272	4	2	8	13	778
Netherlands	979	6	115	15	1	8	3	129	2	11	42	1,311
Yugoslavia	312	3	31	25	17	24	4	11	1,136	39	40	1,642
Other European	934	18	149	73	9	28	7	25	50	629	162	2,084
Other and unspecified	1,933	43	288	44	65	39	9	40	21	87	1,933	4,502
Total brides	**88,953**	**839**	**8,072**	**975**	**1,458**	**1,736**	**555**	**907**	**1,382**	**1,512**	**4,284**	**110,673**

Celebration of marriages

Marriages may be celebrated by a minister of religion registered as an authorised celebrant, by a district registrar or by other persons authorised by the Attorney-General. Notice of the intended marriage must be given to the celebrant at least seven days before the marriage. Most of the marriages are celebrated by ministers of religion although the proportion of civil marriages has been increasing. The registered ministers in 1974 belonged to more than fifty different religious denominations.

MARRIAGES BY AUTHORISED CELEBRANTS: 1974

									Australia	
Category of authorised celebrant	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*No.*	*Proportion of total*
Registered ministers of recognised religious denominations—										
Roman Catholic	10,618	8,544	4,208	2,138	2,289	693	121	398	29,009	26.21
Church of England	10,812	5,992	3,473	1,796	2,381	1,350	64	317	26,185	23.66
Methodist	3,852	2,624	2,262	2,240	956	440	34	40	12,448	11.25
Presbyterian	3,320	3,922	1,802	295	481	135	43	112	10,110	9.14
Orthodox	979	1,046	113	164	93	8	19	17	2,439	2.20
Baptist	735	547	329	260	141	84	4	18	2,118	1.91
Lutheran	171	274	453	607	41	6	9	18	1,579	1.43
Churches of Christ	178	569	202	289	231	22	6	8	1,505	1.36
Congregational	336	314	127	262	88	51	5	6	1,189	1.07
Salvation Army	162	164	86	68	60	38	5	3	586	0.53
Other	809	1,016	448	221	280	130	16	19	2,939	2.66
Other authorised celebrants—										
Ministers of religion	242	247	55	64	96	9	5	10	728	0.66
Civil officers	7,113	4,449	2,528	2,365	2,158	601	235	389	19,838	17.92
Grand Total	**39,327**	**29,708**	**16,086**	**10,769**	**9,295**	**3,567**	**566**	**1,355**	**110,673**	**100.00**
Proportion of total (per cent)—										
Ministers of religion	81.91	85.02	84.28	78.04	76.78	83.15	58.48	71.29	82.08	..
Civil officers	18.09	14.98	15.72	21.96	23.22	16.85	41.52	28.71	17.92	..

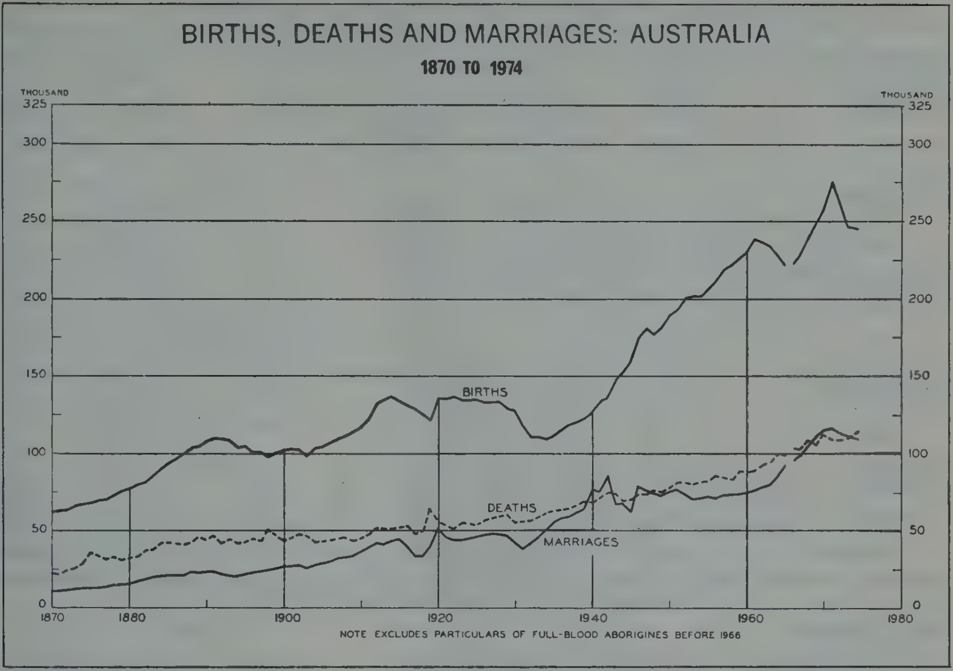


PLATE 28

Divorce and other matrimonial causes

The *Matrimonial Causes Act* 1959 came into operation on 1 February 1959, placing the divorce laws of all States and Territories on a uniform basis. Under this legislation a court may grant decrees of dissolution of marriage (divorce), nullity of marriage, judicial separation, restitution of conjugal rights, and jactitation of marriage (i.e., that a person should refrain from making a false claim that a marriage has taken place between him and another person). Orders may be made for maintenance, the custody and welfare of children, the settlement of property, and damages for adultery. The following statistics refer only to petitions for, and decrees of, dissolution, nullity, and judicial separation. A description of legislation governing divorce and other matrimonial causes in Australia is contained in Year Book No. 55, page 580.

Petitions filed

Statistics of petitions exclude cross-petitions contained in answers by respondents. The following table shows the number of petitions for dissolution of marriage, nullity of marriage, and judicial separation filed in each State and Territory during 1974.

PETITIONS FILED FOR DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION, 1974

Petition for—		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Dissolution—										
By husband		3,533	2,477	1,238	855	1,015	307	57	186	9,668
By wife		7,229	4,079	2,248	1,405	1,212	441	82	388	17,084
Total		*10,762*	*6,556*	*3,486*	*2,260*	*2,227*	*748*	*139*	*574*	*26,752*
Nullity—										
By husband		8	2	5	1	1	2	..	..	19
By wife		31	3	7	2	1	2	1	1	48
Total		*39*	*5*	*12*	*3*	*2*	*4*	*1*	*1*	*67*
Dissolution or nullity—										
By husband		2	2	..	..	..	..	..	..	4
By wife		2	7	..	2	..	..	..	..	11
Total		*4*	*9*	..	*2*	..	..	..	..	*15*
Judicial separation—										
By husband		..	..	..	..	..	..	..	..	..
By wife		4	1	4	6	3	1	..	1	20
Total		*4*	*1*	*4*	*6*	*3*	*1*	..	*1*	*20*
All petitions—										
By husband	No.	3,543	2,481	1,243	856	1,016	309	57	186	9,691
	per cent	33	38	35	38	46	41	41	32	36
By wife	No.	7,266	4,090	2,259	(*a*)1,416	1,216	444	83	390	(*a*)17,164
	per cent	67	62	65	62	54	59	59	68	64
Grand total		**10,809**	**6,571**	**3,502**	**(*a*)2,272**	**2,232**	**753**	**140**	**576**	**(*a*)26,855**

(*a*) Includes one petition for dissolution or judicial separation.

Decrees granted

Statistics of decrees granted refer to decrees *nisi* made absolute except for the following cases, where no decree *nisi* is granted.

(i) Decrees of judicial separation, which do not dissolve the marriage and may be discharged on resumption of cohabitation.

(ii) Decrees of nullity of void marriage, as distinct from nullity of voidable marriage. A void marriage is invalid because of failure to meet a legal requirement, and the original decree of nullity is final. A valid marriage is voidable on proof of one or more of the grounds set out in Section 21 of the *Matrimonial Causes Act* 1959–1966, e.g. that either party is incapable of consummating the marriage.

The following tables show the number of dissolutions of marriage, nullities of marriage, and judicial separations granted in each State and Territory during 1974 classified according to petitioner, and the grounds on which decrees were granted during the years 1970 to 1974.

DECREES FOR DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION, 1974

Decree of—		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Dissolution—										
To husband		2,502	1,651	730	605	771	240	34	132	6,665
To wife		4,615	2,597	1,103	956	982	295	30	235	10,813
To both		..	9	..	..	8	..	..	..	17
Total		*7,117*	*4,257*	*1,833*	*1,561*	*1,761*	*535*	*64*	*367*	*17,495*
Nullity—										
To husband		3	4	..	2	..	..	..	..	9
To wife		16	10	4	2	..	1	..	1	34
Total		*19*	*14*	*4*	*4*	..	*1*	..	*1*	*43*
Judicial separation—										
To husband		..	..	..	..	..	..	..	..	..
To wife		3	1	7	1	..	..	..	1	13
Total		*3*	*1*	*7*	*1*	..	..	..	*1*	*13*
All decrees—										
To husband	No.	2,505	1,655	730	607	771	240	34	132	6,674
	per cent	35	39	40	39	44	45	53	36	38
To wife	No.	4,634	2,608	1,114	959	982	296	30	237	10,860
	per cent	65	61	60	61	56	55	47	64	62
To both	No.	..	9	..	..	8	..	..	..	17
Grand total		**7,139**	**4,272**	**1,844**	**1,566**	**1,761**	**536**	**64**	**369**	**17,551**

DECREES FOR DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION, GROUNDS: AUSTRALIA

Ground	*1970*	*1971*	*1972*	*1973*	*1974*
DISSOLUTION					
Single grounds—					
Desertion	5,098	5,076	5,814	5,891	6,371
Adultery	3,419	3,977	5,088	5,490	6,074
Separation	2,023	2,243	2,442	2,186	2,468
Cruelty	942	983	1,368	1,660	1,717
Drunkenness	142	165	203	224	265
Intoxication by drugs	5	4	5	3	3
Non-compliance with restitution decree	2	1	3	5	1
Refusal to consummate	42	29	39	41	26
Insanity	6	3	1	4	2
Frequent convictions	25	15	19	14	11
Imprisonment	3	8	7	5	10
Other single grounds	15	20	19	16	21
Dual grounds—					
Desertion and adultery	90	87	80	80	94
Desertion and separation	96	79	106	85	78
Desertion and cruelty	59	49	68	75	60
Desertion and drunkenness	14	10	10	14	9
Desertion and failure to pay maintenance	3	6	2	3	2
Desertion and other	7	5	3	5	3
Adultery and separation	4	3	7	5	4
Adultery and cruelty	17	14	26	22	16
Adultery and other	2	1	3	3	2
Separation and other	3	..	3	1	2
Cruelty and drunkenness	160	146	237	226	237
Cruelty and other	5	1	3	3	2
Other dual grounds	1	8	6	7	4
Three grounds or more	15	14	22	27	13
Total	*12,198*	*12,947*	*15,584*	*16,095*	*17,495*
NULLITY					
Bigamy	15	23	9	15	20
Invalid marriage	..	1	3	1	1
Incapacity to consummate	29	15	34	44	20
Other grounds	1	4	3	3	2
Total	*45*	*43*	*49*	*63*	*43*
JUDICIAL SEPARATION					
Desertion	..	1	..	4	1
Adultery	3	2	2	2	3
Cruelty	..	5	1	..	5
Other grounds	3	4	..	1	4
Total	*6*	*12*	*3*	*7*	*13*
ALL DECREES					
Grand total	**12,249**	**13,002**	**15,636**	**16,165**	**17,551**

Divorced persons at each census, 1921 to 1971

The following table shows the number and proportion of divorced persons in Australia as recorded from returns supplied at each census from 1921 to 1971. A classification of divorced persons by ages for the censuses from 1891 to 1947 appeared in earlier issues of the Year Book (*see* No. 39, page 269). The number of divorced persons at the 1911 Census is shown in Year Book No. 58, page 453. Before 1911 no record was made of divorced persons in South Australia, so comparisons cannot be made prior to that date.

DIVORCED PERSONS AT CENSUS DATES: AUSTRALIA, 1921 TO 1971

	Number							*Number per 10,000 of males or females 15 years of age and over*						
Sex	*1921*	*1933*	*1947*	*1954*	*1961*	*1966*	*1971*	*1921*	*1933*	*1947*	*1954*	*1961*	*1966*	*1971*
Males .	4,233	10,298	25,052	32,389	38,640	42,908	61,479	23	42	89	100	105	105	136
Females .	4,304	10,888	27,516	36,650	43,339	51,174	71,421	24	46	96	115	119	125	157

Births and fertility

Information concerning a birth is required to be supplied to the registration authority within 28 days in the Australian Capital Territory and the Northern Territory, and 60 days in the States.

Information is required in all States and Territories concerning what have been commonly known as 'stillbirths'. These are excluded from all the tables of births and deaths in this chapter and are included only in the special tables on stillbirths shown on pages 190–1.

Number of live births

LIVE BIRTHS(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1946–50 .	68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951–55 .	73,737	53,770	30,983	18,045	15,724	7,774	468	922	201,423
1956–60 .	79,613	61,279	34,171	19,977	16,922	8,517	694	1,286	222,459
1961–65 .	82,896	65,193	35,357	21,377	16,861	8,439	897	1,932	232,952
1966–70 .	82,560	68,755	35,378	21,310	19,426	7,979	2,134	2,783	240,325
Annual total—									
1970 .	88,448	73,019	37,530	22,617	21,618	8,185	2,624	3,475	257,516
1971 .	98,466	75,498	39,970	22,996	24,239	8,321	2,832	4,040	276,362
1972 .	95,278	71,807	39,251	21,844	22,177	7,824	2,722	4,066	264,969
1973 .	87,332	67,123	38,067	20,407	20,510	7,326	2,809	4,096	247,670
1974 .	86,162	66,201	37,852	20,181	20,207	7,398	2,808	4,368	245,177

(*a*) Excludes particulars of full-blood Aborigines before 1966.

Masculinity of live births

MASCULINITY(*a*) OF LIVE BIRTHS REGISTERED: AUSTRALIA 1946-1974

	1946–50	*1951–55*	*1956–60*	*1961–65*	*1966–70*	*1970*	*1971*	*1972*	*1973*	*1974*
Total births .	105.60	105.19	105.65	105.83	105.41	105.12	104.34	105.47	105.19	106.24
Ex-nuptial births	104.46	103.36	104.49	106.88	105.11	106.96	106.05	106.38	104.69	108.79

(*a*) Number of males born for every 100 female births. Excludes particulars of full-blood Aborigines before 1966.

Crude birth rates

The simplest method of measuring fertility is to relate the number of births to the mean population, which gives the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period. Other methods of measuring fertility are shown on pages 183–5. The difference between the crude birth rate and the crude death rate is the rate of natural increase (the hatched area in plate 29, page 182). In the past 100 years the crude birth rate has shown a general downward trend. From 1967 to 1971 there was a small upward movement, as a consequence of the increasing number of young women from the postwar baby boom reaching maturity. There was again a decline after 1971.

CRUDE BIRTH RATES(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rates—									
1951–55 .	21.78	22.42	24.11	23.25	25.37	25.58	29.37	32.22	22.86
1956–60 .	21.55	22.52	23.80	22.27	24.20	25.45	31.49	30.10	22.59
1961–65 .	20.49	21.42	22.49	21.11	21.71	23.41	29.30	26.31	21.34
1966–70 .	18.87	20.63	20.41	18.94	21.14	21.00	31.49	24.60	19.95
Annual rates—									
1970 .	19.52	21.16	20.90	19.52	21.74	21.09	33.09	26.36	20.55
1971 .	21.35	21.51	21.84	19.55	23.50	21.27	32.69	28.00	21.62
1972 .	20.39	20.20	20.95	18.37	20.99	19.90	29.23	25.68	20.39
1973 .	18.52	18.66	19.83	16.97	19.12	18.46	29.30	24.24	18.81
1974 .	18.09	18.17	19.23	16.53	18.39	18.42	27.60	24.25	18.33

(*a*) Number of births per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1966.

The birth rates in the table above are based on *live births registered in the respective States and Territories*. Some confinements, however, take place in States other than the State in which the mother usually resides, particularly in areas near State borders. The variations thus caused in the birth rates for the States and Territories by *referring the birth registrations to the mother's usual residence* are shown by the following corrected rates for 1973 and 1974 respectively—New South Wales, 18.61, 18.16; Victoria, 18.60, 18.11; Queensland, 19.75, 19.19; South Australia, 16.90, 16.48; Western Australia, 19.14, 18.42; Tasmania, 18.55, 18.53; Northern Territory, 30.33, 28.07; and Australian Capital Territory, 23.60, 23.40.

Fertility rates

Changes in the crude birth rate are in general indicative of changes in fertility. However, they may result from changes in the proportion of women of childbearing age in the population. Changes in the proportion of such women who are married may also affect fertility and the crude birth rate.

The fertility rates in the following table are for the census years 1881 to 1971. The births for the three years around the census are related to women of childbearing age as enumerated at each census. Although the childbearing age has been taken to be 15–44 years, births to younger and older women are included in the computations. Nuptial births are related to married women aged 15–44 years to give married fertility rates.

Although married fertility fell by 58 per cent between 1880–82 and 1970–72, total fertility and the crude birth rate fell by only 41 per cent. The effect of a decline in the fertility of married women

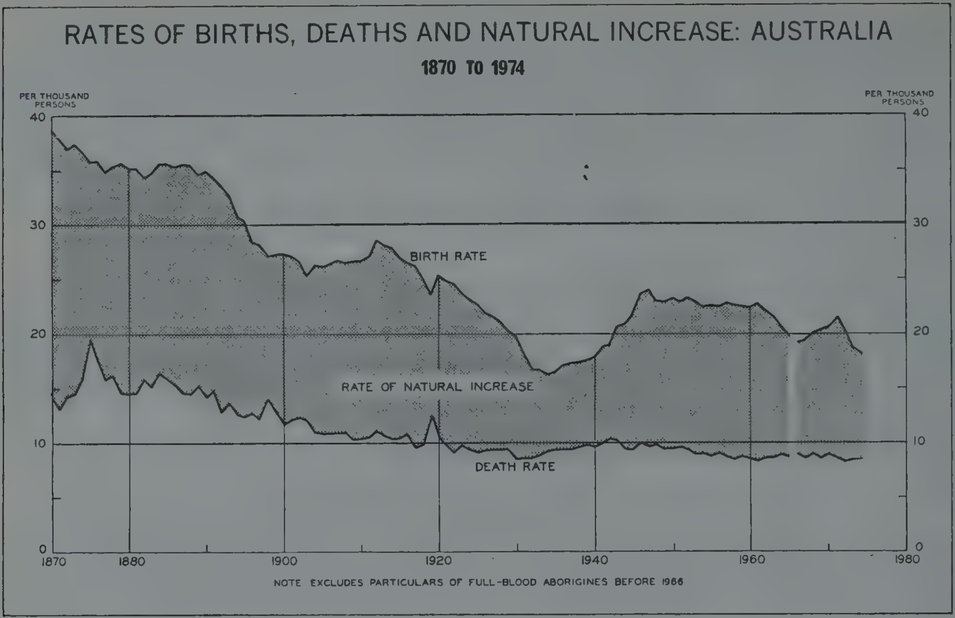


PLATE 29

on total fertility and the crude birthrate is partly offset by an increase in the proportion of such women in the population. In 1881 only 51 per cent of females aged 15–44 were married but in 1966, 68 per cent were married. Also during this time births to unmarried women increased from 14 to 29 per thousand for single, widowed and divorced females aged 15–44.

CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA, 1880-82 TO 1970-72(*a*)

	Average annual rates			*Index Nos (Base: 1880–82=100)*		
		Fertility rates			*Fertility rates*	
Period	*Crude birth rate(b)*	*Births per 1,000 women aged 15–44 years*	*Nuptial births per 1,000 married women aged 15–44 years*	*Crude birth rate(b)*	*Births per 1,000 women aged 15–44 years*	*Nuptial births per 1,000 married women aged 15–44 years*
1880–82	35.3	170	321	**100**	**100**	**100**
1890–92	34.5	159	332	98	94	103
1900–02	27.2	117	235	77	69	73
1910–12	27.2	117	236	77	69	74
1920–22	25.0	107	197	71	63	61
1932–34	16.7	71	131	47	42	41
1946–48	23.6	104	160	67	61	50
1953–55	22.7	109	149	64	64	46
1960–62	22.5	112	154	64	66	48
1965–67	19.5	95	132	55	56	41
1970–72	20.8	100	134	59	59	42

(*a*) Excludes particulars of full-blood Aborigines before 1965–67. (*b*) Number of births per 1,000 of mean population.

Age-specific birth rates

Fertility within the childbearing group varies considerably, as may be seen from the five-year age-specific rates in the following table. These rates were obtained by dividing births according to age of mother by the estimated number of women in the corresponding five-year age group.

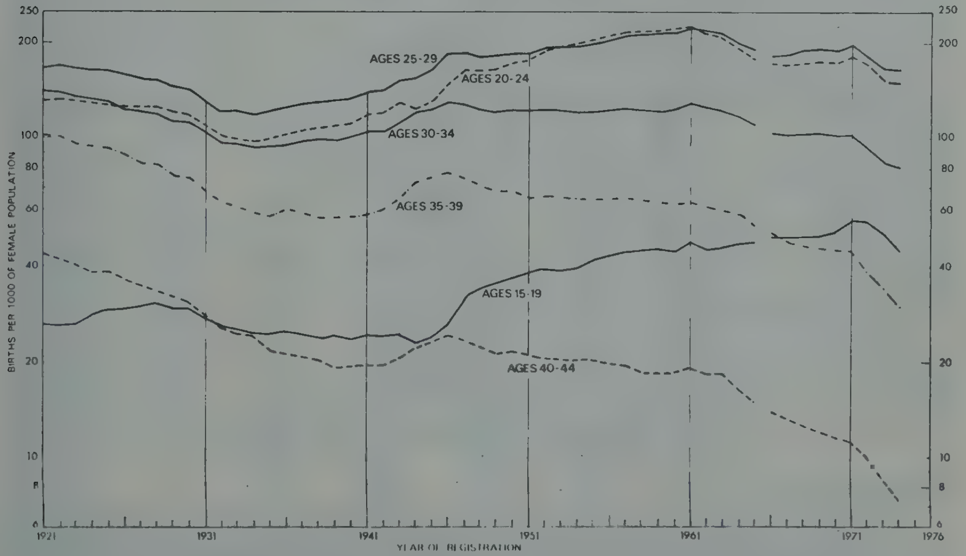
Total fertility is obtained by summing single age specific rates or by summing five-year age-specific rates and multiplying by 5. This total, divided by 1000, represents the hypothetical number of children a woman would bear during her lifetime if she experienced the rates of the year shown. Total fertility rose to a peak in 1961, of 3.4 children per woman, declined to 2.8 in 1967 and to 2.40 in 1974.

AGE-SPECIFIC BIRTH RATES(*a*): AUSTRALIA

Period	*Age group (years)* 15–19	20–24	25–29	30–34	35–39	40–44	45–49	*Total fertility*
1946–50(*b*) .	33.05	164.22	183.29	126.56	72.33	22.71	1.76	3.020
1951–55(*b*) .	39.54	192.81	192.97	123.51	65.05	20.50	1.53	3.180
1956–60(*b*) .	44.20	216.42	211.47	126.06	63.91	18.96	1.45	3.412
1961–65(*b*) .	46.50	203.95	207.15	122.38	59.18	17.54	1.19	3.289
1966–70(*b*) .	49.32	172.65	187.64	103.00	46.85	12.86	0.99	2.867
1970 . .	51.13	171.99	188.63	101.24	44.29	11.69	0.78	2.849
1971 . .	55.50	181.87	193.50	101.78	44.15	11.31	0.78	2.944
1972 . .	54.44	168.66	181.65	94.03	38.87	10.01	0.74	2.742
1973 . .	49.04	155.35	166.91	84.16	33.62	8.42	0.60	2.491
1974 . .	45.24	150.08	164.49	81.46	30.01	7.37	0.46	2.396

(*a*) Number of births per 1,000 women in each age group. Excludes particulars of full-blood Aborigines before 1966. (*b*) Average annual rates.

AGE SPECIFIC BIRTH RATES: AUSTRALIA
1921 TO 1974
(NUMBER OF BIRTHS PER 1,000 OF FEMALE POPULATION IN EACH AGE GROUP)



NOTE (1) The vertical scale is logarithmic, and the curves rise and fall according to the rate of increase and decrease, actual numbers are indicated by the scale
(2) Prior to 1966 birth registrations identified as those of full blood Aborigines were excluded

PLATE 30

Gross and net reproduction rates

The gross reproduction rate is derived from total fertility and the ratio of female to total births. It indicates the number of female children who would be born on average to women supposing the rates from which it was calculated were to apply throughout the reproductive period. It is an indication of the extent to which the population is reproducing itself except that it does not allow for females who failed to survive to the end of the childbearing period. The net reproduction rate allows for such mortality. It is obtained by multiplying the age-specific rates by the survivor proportions in the corresponding age group of the stationary or life table population. Mortality in childhood and young adulthood is now so low that there is little difference between current gross and net reproduction rates.

GROSS AND NET REPRODUCTION RATES(*a*): AUSTRALIA

Year	*Gross reproduction rate*	*Net reproduction rate*	*Year*	*Gross reproduction rate*	*Net reproduction rate*
1947	1.494	(*b*)1.416	1970	1.389	(*e*)1.347
1954	1.559	(*c*)1.499	1971	1.441	(*e*)1.397
1961	1.728	(*d*)1.672	1972	1.334	(*e*)1.294
1968	1.402	(*e*)1.359	1973	1.214	(*e*)1.177
1969	1.402	(*e*)1.359	1974	1.156	(*e*)1.121

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) 1946–1948 mortality experience used. (*c*) 1953–1955 mortality experience used. (*d*) 1960–1962 mortality experience used. (*e*) 1965–1967 mortality experience used.

In the following table a comparison is given of the gross and net reproduction rates recorded recently for various countries. The registration of vital events has not been fully established in many countries and consequently details for the calculation of reproduction rates for those countries are not available.

GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES

(Source: *Population Index, April–June 1975*, Office of Population Research, Princeton University)(*a*)

Country	*Period*	*Reproduction rate*		*Country*	*Period*	*Reproduction rate*	
		Gross	*Net*			*Gross*	*Net*
Venezuela	1970	2.73	2.44	Belgium	1970	1.09	1.06
Panama	1972	2.40	2.14	Norway	1973	1.08	1.06
Ireland	1970	1.96	1.88	England and Wales .	1972	1.06	1.03
Trinidad and Tobago .	1971	1.73	1.55	Czechoslovakia . .	1971	1.04	1.00
Hong Kong	1971	1.66	1.60	German, Dem. Rep. .	1971	1.04	1.00
New Zealand . . .	1970	1.49	1.45	Malta	1973	1.02	0.96
Singapore	1970	1.49	1.40	Denmark	1972	0.99	0.97
France	1971	1.21	1.19	United States of America	1972	0.99	0.96
Australia	**1973**	**1.21**	**1.12**	Canada	1973	0.94	0.91
Union of Soviet Socialist Republics . . .	1972–73	1.19	1.14	Austria	1973	0.94	0.90
				Sweden	1972	0.93	0.92
Romania	1973	1.18	1.12	Hungary	1972	0.93	0.89
Poland	1973	1.10	1.05	Germany, Fed. Rep. .	1971	0.93	0.89
Yugoslavia	1970	1.10	1.03	Finland	1970	0.89	0.86

(*a*) Source for statistics other than Australia.

Fertility of marriages

Estimates of the fertility of marriages may be made by relating nuptial births in each year to the marriages from which they could have resulted. Births to women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously and the resulting rates are added to give a total for all durations, namely, the index of current marriage fertility.

The figure for a particular year gives the estimated number of children which a thousand marriages would produce according to the fertility conditions of that year.

Births are omitted from the calculation if the marriage did not take place in Australia. Births which occur overseas to Australian marriages cannot be included and hence some understatement is present.

The following table gives an analysis of the index, shown in the total column, according to duration of marriage, expressing the results as births per thousand marriages.

DURATION-SPECIFIC FERTILITY RATES(*a*): AUSTRALIA

Births occurring in—	*Duration of marriage (years)*										
	Under 1	*1*	*2*	*3*	*4*	*Total under 5*	*5–9*	*10–14*	*15–19*	*20 and over*	*Total*
1962	389	318	324	290	247	1,568	781	308	101	22	2,780
1963	384	307	318	288	241	1,538	756	302	105	24	2,725
1964	368	288	296	275	231	1,458	712	283	99	21	2,573
1965	341	275	287	261	222	1,386	662	260	90	19	2,417
1966	324	258	282	260	215	1,339	633	238	84	19	2,318
1967	308	251	273	268	222	1,322	648	239	80	18	2,307
1968	308	247	280	267	235	1,337	668	234	79	17	2,335
1969	290	246	279	270	231	1,316	688	233	75	17	2,329
1970	278	236	275	262	231	1,282	675	230	75	16	2,278
1971	282	240	279	270	235	1,306	694	231	75	15	2,321
1972	257	220	260	258	225	1,220	638	203	64	15	2,140
1973	228	201	240	246	214	1,129	581	170	54	12	1,946
1974	206	202	240	242	215	1,105	572	152	45	9	1,883

(*a*) Number of births per thousand marriages. From 1966 includes births of Aborigines where parents were legally married and excludes births of tribal marriages.

The summation of duration-specific rates for a particular year without reference to changing patterns in age at marriage or age of parents contributes to the hypothetical nature of the index. It is more satisfactory, therefore, to express the rates in cohort form by following the experience of marriages of a particular year cumulated over successive durations of marriage.

Since the fertile period of a marriage has a duration of up to some thirty years, completed fertility can only be determined with certainty for marriages occurring before 1940. Fortunately, because of the concentration of births in the early years of marriage the ultimate level of fertility and the size of family can be assessed with a fair degree of precision by the end of the fifteenth year. The most recent cohort to reach this duration was that of 1959–60.

To determine the relevant marriage cohorts from which births can have derived, a system of quarterly weights is applied. Births in 1969 to marriages in their third year, for example, could have arisen from marriages in any one of the eight quarters of 1966 and 1967. Proportions of the marriages in each of these quarters, namely $\frac{1}{8}$, $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$, $\frac{7}{8}$, $\frac{5}{8}$, $\frac{3}{8}$, and $\frac{1}{8}$ respectively, are summed to arrive at the total marriages in the 1966–67 cohort. This method is applied to all marriages of completed durations three or more years. The first two years of marriage are weighted on a monthly basis.

CUMULATED DURATION-SPECIFIC FERTILITY RATES, MARRIAGE COHORTS(*a*), AUSTRALIA

Marriages of year—	*Completed duration of marriage (years)*						
	1	*2*	*3*	*4*	*5*	*10*	*15*
1955–56	352	674	983	1,262	1,511	2,262	2,497
1956–57	367	685	1,001	1,289	1,543	2,262	2,495
1957–58	365	684	1,001	1,291	1,538	2,219	2,441
1958–59	379	701	1,029	1,319	1,560	2,216	2,435
1959–60	382	714	1,038	1,326	1,557	2,210	2,417
1960–61	403	721	1,039	1,314	1,536	2,194	..
1961–62	389	696	992	1,253	1,468	2,125	..
1962–63	384	672	959	1,219	1,441	2,109	..
1963–64	368	643	925	1,193	1,428	2,089	..
1964–65	341	599	872	1,139	1,370	2,001	..
1965–66	324	575	855	1,125	1,356	..	..
1966–67	308	555	834	1,096	1,331	..	..
1967–68	308	554	829	1,099	1,324	..	..
1968–69	290	526	805	1,063	1,277	..	..
1969–70	278	518	778	1,024	1,239	..	..
1970–71	282	502	742	984	..	..	..
1971–72	257	458	698	..	..	..	..
1972–73	228	430	..	..	..	..	..
1973–74	206	..	..	..	..	..	..

(*a*) Cumulated number of births per thousand marriages. From 1966 includes births of Aborigines where parents were legally married and excludes births of tribal marriages.

A more detailed analysis of the figures in the above table and of earlier cohorts has been made by tabulating the number of births within each duration of marriage which were first, second, third or subsequent births to the marriages under consideration. Details then derived of relative family size at each duration of marriage have enabled the computation of duration-parity-specific fertility rates .

Ex-nuptial live births

A birth is registered as ex-nuptial if the parents were not married to one another at the time of the confinement. Births to tribally-married Aborigines are classified as nuptial. Ex-nuptial births comprised 9.77 per cent of all births in 1973 and 9.55 per cent in 1974. The variations in the proportions of ex-nuptial live births as between the individual States and Territories for 1972 and for Australia at intervals from 1946 to 1972 are shown in the following tables. The high ex-nuptial birth rate for the Northern Territory is due in part to difficulties in identifying births where parents were tribally married. It is suspected that a substantial number of ex-nuptial births for the Northern Territory are in fact births to women adhering to tribal marriage systems.

EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION, 1972

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number—									
1973 . . .	8,726	4,611	5,241	1,800	2,497	743	383	197	24,198
1974 . . .	8,371	4,394	4,955	1,879	2,352	788	458	211	23,408
Proportion of total births %—									
1973 . . .	9.99	6.87	13.77	8.82	12.17	10.14	13.63	4.81	9.77
1974 . . .	9.72	6.64	13.09	9.31	11.64	10.65	16.31	4.83	9.55

EX-NUPTIAL LIVE BIRTHS: NUMBERS, PROPORTION AND RATES(*a*): AUSTRALIA

	Annual average									
	1946–50	*1951–55*	*1956–60*	*1961–65*	*1966–70*	*1970*	*1971*	*1972*	*1973*	*1974*
Number . . .	7,349	7,999	10,027	13,798	18,937	21,367	25,629	25,659	24,198	23,408
Rates(*b*) . . .	0.95	0.91	1.02	1.25	1.57	1.71	2.01	1.97	1.84	1.75
Proportion of total births % . . .	4.04	3.97	4.51	5.92	7.88	8.30	9.27	9.68	9.77	9.55

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) Number of ex-nuptial births per 1,000 of mean population.

A further measure of ex-nuptiality is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 is as follows: 1946–48, 11.45; 1953–55, 14.45; 1960–62, 18.49; 1965–67, 20.96; and 1970–72, 28.59. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown.

Legitimations

Under the provisions of the Commonwealth *Marriage Act* 1961–1966, which came into operation on 1 September 1963, a child whose parents were not married to each other at the time of its birth becomes legitimised on the subsequent marriage of its parents. The legitimation takes place whether or not there was a legal impediment to the marriage of the parents at the time of the child's birth and whether or not the child was still living at the time of the marriage, or in the case of a child born before 1 September 1963, at that date. Prior to the introduction of this Act, legitimations took place under Acts passed in the several States to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who came within the scope of their purposes, born before or after the passing thereof, was deemed to be legitimate from birth by the post-natal union of its parents and entitled to the status of offspring born in wedlock. The number of children legitimised in Australia was 3,747 during 1973 and 3,509 during 1974.

Multiple births

Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are stillborn the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live-born are registered as single births.

Number of confinements

The following table shows the number of single and multiple confinements and the number of live births. The table includes only those confinements resulting in at least one live birth.

LIVE BIRTHS AND CONFINEMENTS, 1974

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
LIVE BIRTHS									
Single births	84,334	65,010	37,146	19,786	19,855	7,273	2,751	4,282	240,437
Twins	1,794	1,182	691	385	347	125	57	86	4,667
Other multiple	34	9	15	10	5	..	..	..	73
Total	**86,162**	**66,201**	**37,852**	**20,181**	**20,207**	**7,398**	**2,808**	**4,368**	**245,177**
Of which—									
Males	44,465	33,993	19,605	10,489	10,282	3,760	1,444	2,257	126,295
Females	41,697	32,208	18,247	9,692	9,925	3,638	1,364	2,111	118,882
STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE									
Twins	34	4	15	1	7	3	1	2	67
Other multiple	3	..	..	..	1	..	..	..	4
CONFINEMENTS RESULTING IN BIRTHS SHOWN ABOVE									
Nuptial	76,978	61,245	32,592	18,119	17,701	6,554	2,324	4,116	219,629
Ex-nuptial	8,282	4,361	4,912	1,863	2,333	783	456	210	23,200
Total	**85,260**	**65,606**	**37,504**	**19,982**	**20,034**	**7,337**	**2,780**	**4,326**	**242,829**

NOTE. Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy was liveborn, the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. *See also* page 189.

Multiple births recorded during 1974 comprised 2,367 cases of twins, 23 cases of triplets, and 2 cases of other multiple births; the resulting number of live-born and still born children respectively was 4,667 and 67 for twins, 65 and 4 for triplets, and 8 and nil for other multiple births. This represents an average of 9.75 recorded cases of twins and 0.09 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 100 mothers and mothers of triplets 1 in every 10,558. Total cases of multiple births represented 9.85 per 1,000 confinements or 1 in every 102 mothers.

Confinements—relative ages of parents

The relative ages of the parents of children whose births were registered in 1974 have been tabulated separately for total nuptial confinements and for nuptial multiple confinements in *Births, 1974* (4.4).

CONFINEMENTS, BY RELATIVE AGES OF PARENTS: AUSTRALIA, 1974

	Age of mother (years)									
Age of father (years)	*Under 15*	*15-19*	*20-24*	*25-29*	*30-34*	*35-39*	*40-44*	*45 and over*	*Not stated*	*Total*
Under 20	3	2,935	504	10	2	..	..	..	2	3,456
20–24	8	10,489	30,310	3,322	204	12	2	..	..	44,347
25-29	4	2,532	36,356	44,513	3,525	286	29	1	..	87,246
30–34	..	427	6,358	27,459	15,650	1,303	95	4	..	51,296
35–39	1	106	1,135	5,620	9,479	4,358	323	7	..	21,029
40–44	..	31	247	1,177	2,659	3,145	1,064	20	..	8,343
45–49	..	6	70	352	611	966	672	72	..	2,749
50–54	2	5	36	101	181	239	158	36	..	758
55–59	..	1	11	31	56	57	35	11	..	202
60–64	..	2	5	11	15	11	18	5	..	67
65 and over(*a*)	2	26	34	31	15	14	7	2	5	136
Total nuptial	*20*	*16,560*	*75,066*	*82,627*	*32,397*	*10,391*	*2,403*	*158*	*7*	*219,629*
Total ex-nuptial	*148*	*9,408*	*7,068*	*3,733*	*1,762*	*792*	*235*	*17*	*37*	*23,200*
Total	**168**	**25,968**	**82,134**	**86,360**	**34,159**	**11,183**	**2,638**	**175**	**44**	**242,829**

(*a*) Includes 110 confinements in which the age of the father was not stated.

Confinements—relative countries of birth of parents

The following table shows the relative countries of birth of parents of children whose births from nuptial confinements were registered during 1974.

NUPTIAL CONFINEMENTS, BY RELATIVE COUNTRIES OF BIRTH OF PARENTS AUSTRALIA, 1974

	Country of birth of mother											
Country of birth of father	*Australia*	*New Zealand*	*United Kingdom and Ireland*	*Germany*	*Greece*	*Italy*	*Malta*	*Netherlands*	*Yugoslavia*	*Other European*	*Other and unspecified*	*Total fathers*
Australia . .	139,449	893	7,976	1,264	132	530	406	1,391	132	726	2,007	154,906
New Zealand . .	1,118	478	131	21	2	8	9	16	1	12	42	1,838
United Kingdom and Ireland . .	10,171	189	7,693	229	12	69	78	189	20	187	495	19,332
Germany . .	1,889	28	271	520	16	28	21	56	23	148	136	3,136
Greece . . .	498	7	36	18	5,182	19	7	9	19	31	209	6,035
Italy . . .	2,324	19	231	62	26	6,254	75	43	46	111	171	9,362
Malta . . .	663	4	122	24	3	17	1,458	19	3	10	47	2,370
Netherlands . .	2,031	24	214	58	3	23	20	715	2	32	96	3,218
Yugoslavia . .	588	9	94	84	63	62	16	24	3,958	83	54	5,035
Other European .	1,577	36	266	211	33	49	22	58	59	1,562	225	4,098
Other and unspecified	2,641	79	422	100	146	79	38	82	33	145	6,534	10,299
Total mothers	**162,949**	**1,766**	**17,456**	**2,591**	**5,618**	**7,138**	**2,150**	**2,602**	**4,296**	**3,047**	**10,016**	**219,629**

Confinements—age, duration of marriage and issue of mothers

The total number of nuptial confinements resulting in live births in 1974 was 219,629, comprising 217,455 single births, 2,149 cases of twins, 23 cases of triplets and two cases of other multiple births. The following tables relating to previous issue exclude the issue of former marriages and stillborn children. On the other hand, they include in some States children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the calculation of average issue shown.

The following table shows that in 1974 the average size of family increased fairly uniformly with the duration of the marriage. However, the average issue relates only to those women who gave birth in 1974. The table should not be interpreted to mean that, for example, *all* women who have been married for over ten years have an average of more than four children or those married twenty years, six children. The average issue of all married mothers who bore children in 1974 was 2.06 compared with 2.12 in 1973, 2.17 in 1972, 2.22 in 1971, and 2.27 in 1970.

NUPTIAL CONFINEMENTS BY DURATION OF MARRIAGE, AND AVERAGE ISSUE OF MOTHERS AUSTRALIA, 1974

Duration of marriage	*Total nuptial confinements*	*Average issue of mother*
Under 1 year	24,238	1.05
1 year	24,339	1.22
2 years	29,524	1.49
3 „	30,133	1.72
4 „	26,487	1.96
5 „	21,332	2.21
6 „	15,902	2.48
7 „	11,769	2.72
8 „	9,009	2.96
9 „	6,531	3.21
10–14 years	14,546	3.81
15–19 „	4,311	4.96
20–24 „	882	6.33
25 years and over . . .	64	8.02
Not stated	562	3.48
Total	**219,629**	**2.07**

NUPTIAL CONFINEMENTS, BY AGE OF MOTHER AND PREVIOUS ISSUE AUSTRALIA, 1974

Previous issue	*Age of mother (years)* *Under 20*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45 and over*	*Not stated*	*Total married mothers*
0	13,380	39,475	25,815	5,758	1,475	319	21	5	86,248
1	2,959	27,720	33,501	9,482	2,024	298	11	1	75,996
2	225	6,453	16,594	8,956	2,215	354	13	..	34,810
3	13	1,179	4,986	4,876	1,908	382	18	..	13,362
4	..	193	1,181	1,903	1,181	308	18	..	4,784
5	..	34	370	841	687	244	19	..	2,195
6	..	4	121	317	409	176	11	..	1,038
7	..	1	39	148	223	110	12	..	533
8	..	..	10	58	128	85	13	..	294
9 and over	..	..	4	55	140	127	22	..	348
Not stated	3	7	6	3	1	..	..	1	21
Total married mothers	**16,580**	**75,066**	**82,627**	**32,397**	**10,391**	**2,403**	**158**	**7**	**219,629**

Multiple births—previous issue of mothers

Of married mothers of twins in 1974, 759 had no previous issue either living or dead, 722 had one child previously, 381 had two previous issue, 166 had three, 52 had four, 25 had five, 19 had six, 9 had seven, 7 had eight, 7 had nine or more and 2 had unknown previous issue. Of the 23 cases of nuptial triplets and 2 cases of other multiple births registered during 1974, 13 mothers had no previous issue, 4 had one, 4 had two, 2 had three and 2 had four previous issue.

Nuptial first births

A nuptial first birth is defined as the first birth to the existing marriage. About two-thirds of first births occur to women aged under 25, and about half occur within the first two years of marriage (in 1974, 27 per cent in the first and 23 per cent in the second year).

The following table shows the number of nuptial first births classified by grouped ages of mothers and grouped durations of marriage of mothers.

NUPTIAL FIRST BIRTHS, BY AGE OF MOTHER AND DURATION OF MARRIAGE AUSTRALIA, 1974

Duration of marriage	*Age of mother (years)* *Under 20*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45 and over*	*Not stated*	*Total*
Under 8 months	8,425	5,426	1,227	401	126	34	1	1	15,641
8 months	383	686	249	91	30	2	..	..	1,441
9 ,,	496	1,066	418	144	41	6	..	..	2,171
10 ,,	492	1,069	385	141	37	3	..	..	2,127
11 ,,	465	1,019	365	125	50	7	..	..	2,031
Total under 1 year	*10,261*	*9,266*	*2,644*	*902*	*284*	*52*	*1*	*1*	*23,411*
1 year and under 2 years	2,491	11,532	4,110	1,254	344	77	3	..	19,811
2 years ,, ,, 3 ,,	439	10,037	4,621	884	218	41	2	2	16,244
3 ,, ,, ,, 4 ,,	73	5,761	4,835	601	121	33	3	..	11,427
4 ,, ,, ,, 5 ,,	12	2,128	4,165	491	86	18	4	..	6,904
5 ,, ,, ,, 10 ,,	3	717	5,349	1,314	212	39	5	2	7,641
10 ,, ,, ,, 15 ,,	..	..	82	296	142	22	1	..	543
15 years and over	..	..	..	12	62	36	2	..	112
Not stated	101	34	9	4	6	1	..	..	155
Total	**13,380**	**39,475**	**25,815**	**5,758**	**1,475**	**319**	**21**	**5**	**86,248**

The following table shows for nuptial confinements, a comparison between the numbers of mothers having their first confinement and those having a subsequent confinement.

NUPTIAL FIRST BIRTHS AND SUBSEQUENT CONFINEMENTS(*a*)
AUSTRALIA

Period	*Nuptial confinements*			*Proportion of first to total nuptial confinements (per cent)*
	First	*Other*	*Total*	
Annual average—				
1946–50 . . .	63,413	109,044	172,457	36.77
1951–55 . . .	63,062	128,176	191,238	32.98
1956–60 . . .	65,695	144,352	210,047	31.28
1961–65 . . .	69,280	147,549	216,829	31.95
1966–70 . . .	81,103	138,000	219,103	37.02
Annual total—				
1970 . . .	88,412	145,227	233,639	37.84
1971 . . .	95,418	152,820	248,238	38.44
1972 . . .	91,683	145,272	236,955	38.69
1973 . . .	85,707	135,575	221,282	38.73
1974 . . .	86,248	133,381	219,629	39.27

(*a*) Excludes particulars of full-blood Aborigines before 1966.

Stillbirths

From 1972, statistics of stillbirths have been compiled on the basis of amended legislation which provides for all foetal deaths of at least twenty weeks gestation (or 400 grammes weight) to be registered. The dates on which the legislation came into effect for each State are as follows: New South Wales, January 1969; Victoria, May 1971; Queensland, October 1967; South Australia, January 1968; Western Australia, January 1968; Tasmania, March 1967; Northern Territory, September 1964; Australian Capital Territory, September 1969. Comparisons of the figures and rates prior to 1972 are affected by the differences in the definitions adopted by the various states.

STILLBIRTHS(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1946–50 . . .	1,405	949	626	368	274	161	n.a.	12	(*b*)3,795
1951–55 . . .	1,239	849	581	290	271	139	8	16	3,393
1956–60 . . .	1,253	839	558	274	235	109	6	19	3,293
1961–65 . . .	1,104	794	468	264	194	87	17	18	2,946
1966–70 . . .	876	767	341	215	192	86	(*c*)39	27	2,543
Annual total—									
1970 . . .	888	782	312	200	211	80	(*c*)30	29	2,532
1971 . . .	893	760	329	199	206	67	(*c*)24	41	2,519
1972 . . .	1,151	842	429	229	258	88	(*c*)44	48	3,089
1973 . . .	1,028	802	387	244	272	98	(*c*)40	53	2,924
1974 . . .	1,036	787	406	236	274	82	(*c*)51	42	2,914

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) Excludes Northern Territory. (*c*) Figures from 1966 include foetal deaths occurring in remote localities for which the period of gestation was not known. The numbers of such cases were: 1970, 14; 1971, 3; 1972, 11; 1973, 5; 1974, 13. The Registration Ordinance requires registration of any foetal death of at least twenty weeks gestation.

PROPORTION OF STILLBIRTHS(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1946–50	20.0	19.6	21.9	22.1	20.5	22.3	n.a.	16.3	(*b*)20.5
1951–55	16.5	15.5	18.4	15.8	17.0	17.5	17.2	17.1	16.6
1956–60	15.5	13.5	16.1	13.5	13.7	12.6	8.6	14.3	14.6
1961–65	13.1	12.0	13.1	12.2	11.4	10.2	18.4	9.3	12.5
1966–70	10.5	11.0	9.5	10.0	9.8	10.7	18.3	9.7	10.5
Annual rate—									
1970	9.9	10.6	8.2	8.8	9.7	9.7	11.3	8.3	9.7
1971	9.0	10.0	8.2	8.6	8.4	7.9	8.4	10.0	9.0
1972	11.9	11.6	10.8	10.4	11.5	11.1	15.9	11.7	11.5
1973	11.6	11.8	10.1	11.8	13.1	13.2	14.0	12.8	11.7
1974	11.9	11.7	10.6	11.6	13.4	11.0	17.8	9.5	11.7

(*a*) Number of stillbirths per 1,000 of all births (live and still). Excludes particulars of full-blood Aborigines before 1966. (*b*) Excludes Northern Territory.

NOTE. Because of the smallness of the numbers of stillbirths occurring in the Australian Capital Territory and the Northern Territory the rates for these Territories are subject to considerable fluctuation.

Mortality

This section contains statistics of general mortality and infant mortality. Statistics of foetal deaths (stillbirths) are shown separately in the preceding section. For the registration of a death the period allowed is 8 days in Tasmania, 14 days in South Australia, Western Australia, Australian Capital Territory, and Northern Territory, 21 days in Victoria, and 30 days in New South Wales and Queensland.

Number of deaths

The following table shows the number of deaths registered in each State and Territory. Stillbirths, although registered as both births and deaths in some States are excluded from the death statistics.

DEATHS(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust*
Annual average—									
1946–50(*b*)	29,552	21,827	10,357	6,507	4,802	2,459	76	103	75,683
1951–55	32,135	22,900	11,187	7,182	5,263	2,576	109	131	81,483
1956–60	34,002	24,254	12,008	7,732	5,523	2,668	117	184	86,488
1961–65	37,514	26,569	13,570	8,388	6,043	2,939	152	290	95 465
1966–70	41,249	29,265	15,711	9,562	7,208	3,231	540	497	107,263
Annual total—									
1970	43,601	30,335	17,055	10,138	7,543	3,174	608	594	113,048
1971	41,691	30,598	16,339	9,686	7,806	3,295	637	598	110,650
1972	41,652	29,856	16,598	9,764	7,441	3,227	553	669	109,760
1973	41,122	30,696	16,732	9,835	7,845	3,347	580	665	r110,822
1974—									
Males	24,168	16,704	10,365	5,728	4,550	1,954	396	434	64,299
Females	19,831	14,171	7,763	4,508	3,228	1,530	179	324	51,534
Persons	**43,999**	**30,875**	**18,128**	**10,236**	**7,778**	**3,484**	**575**	**758**	**115,833**

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September 1939 to June 1947.

NOTE. Annual averages for each five-year period from 1861 to 1950 were published in Year Book No. 39, page 597.

Crude death rates

The simplest method of measuring mortality is to relate the number of deaths for a given period to the mean population for that period, which gives the crude death rate. This rate for a given period measures the number per thousand of population by which the population is depleted through deaths during that period.

CRUDE DEATH RATES(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Average annual rate—									
1946–50(*b*)	9.70	10.37	9.13	9.76	9.23	9.30	6.27	5.31	9.74
1951–55	9.49	9.55	8.71	9.25	8.49	8.48	6.86	4.58	9.25
1956–60	9.20	8.91	8.36	8.62	7.90	7.97	5.32	4.31	8.78
1961–65	9.27	8.73	8.63	8.28	7.78	8.15	4.95	3.94	8.75
1966–70	9.43	8.78	9.07	8.50	7.84	8.50	7.97	4.40	8.90
Annual rate—									
1970	9.62	8.79	9.50	8.75	7.59	8.18	7.67	4.51	9.02
1971	9.04	8.72	8.93	8.23	7.57	8.42	7.37	4.15	8.66
1972	8.91	8.39	8.86	8.21	7.04	8.21	6.04	4.26	8.45
1973	8.72	8.53	8.72	8.18	7.31	8.43	6.05	3.93	8.42
1974—									
Males	10.14	9.18	10.45	9.41	8.11	9.72	7.21	4.71	9.58
Females	8.34	7.77	7.95	7.37	6.01	7.63	3.82	3.68	7.73
Persons	**9.24**	**8.47**	**9.21**	**8.39**	**7.08**	**8.68**	**5.65**	**4.21**	**8.66**

(*a*) Number of deaths per 1,000 of mean population. Excludes particulars of full-blood Aborigines before 1966. (*b*) Excludes deaths of defence personnel, etc., from September 1939 to June 1947.

A graph showing the crude death rate for each year from 1870 to 1974 is shown on plate 29 page 182.

The crude death rate is affected by the particular sex and age composition of the population. While it is an element in the rate of natural increase of the population it cannot validly be used to compare the relative incidence of mortality in different populations. The crude death rate will tend to be low if the community contains a large proportion of young people and high if the population is elderly. Age specific death rates and true death rates are a guide to comparative mortality.

True death rates

A composite measure of mortality unaffected by the age structure of the population can be obtained from life tables. The basic life table functions include expectation of life remaining at each year of age. The reciprocal of the expectation of life at birth is known as the true death rate, since, if the expectation of life of a person at birth is say, fifty years, then each person will on the average die fifty years after birth, so that in a stationary population one person in fifty or twenty per thousand, will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of mortality from each year of age to the next. The next table sets out true death rates for the periods covered by Australian life tables.

TRUE DEATH RATES: AUSTRALIA

Period	True death rate(a) Males(b)	True death rate(a) Females(c)
1946–48 . . .	15.14	14.16
1953–55 . . .	14.89	13.75
1960–62 . . .	14.72	13.48
1965–67 . . .	14.79	13.49
1969	14.81	13.40
1970	14.84	13.49
1971	14.72	13.42
1972	14.66	13.34
1973	14.66	13.30

(a) Excludes particulars of full-blood Aborigines before 1965–67. (b) Number of deaths per 1,000 males in stationary population. (c) Number of deaths per 1,000 females in stationary population.

The crude death rates of Australia and the more populous countries of the world for the latest available year are shown in the table in International Vital Statistics at the end of this chapter.

Australian Life Tables

It has been the practice at each census from 1911 onwards to prepare complete life tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881–90, 1891–1900 and 1901–10. These compilations furnished a comprehensive view of Australian mortality in respect of sex, time, and geographical distribution, and practically superseded all life tables prepared in Australia prior to 1911. For subsequent censuses the official life tables have been prepared only for Australia as a whole. They have been based upon recorded census population and the deaths of the three years around the census. The 1965–67 life tables included particulars of Aborigines for the first time. The 1920–22 life tables were prepared by the Commonwealth Statistician, those of 1932–34, 1946–48, 1953–55, 1960–62 and 1965–67 by the Commonwealth Actuary. Full particulars of the data used and the methods of construction are to be found in the reports of the Commonwealth Actuary.

COMPLETE EXPECTATION OF LIFE ($\overset{\circ}{e}_x$) AT SELECTED AGES

Age (x)	Males 1901–10	Males 1953–55	Males 1960–62	Males 1965–67(a)	Females 1901–10	Females 1953–55	Females 1960–62	Females 1965–67(a)
0 . .	55.20	67.14	67.92	67.63	58.84	72.75	74.18	74.15
10 . .	53.53	59.53	59.93	59.50	56.38	64.78	65.92	65.75
20 . .	44.74	50.10	50.40	49.98	47.52	55.06	56.16	56.00
30 . .	36.52	40.90	41.12	40.72	39.33	45.43	46.49	46.34
40 . .	28.56	31.65	31.84	31.44	31.47	35.99	36.99	36.85
50 . .	21.16	22.92	23.13	22.76	23.69	27.03	27.92	27.83
60 . .	14.35	15.47	15.60	15.27	16.20	18.78	19.51	19.52
70 . .	8.67	9.59	9.77	9.52	9.96	11.62	12.19	12.23
80 . .	4.96	5.47	5.57	5.51	5.73	6.30	6.68	6.72

(a) Includes particulars of full-blood Aborigines.

NOTE. $\overset{\circ}{e}_x$ = complete expectation of life at specified ages.

The progress towards lower mortality rates evident over the past sixty years or more, did not continue in the 1960s. Expectation of life at birth was slightly less in 1965–67 than in 1960–62 for both males and females. The detailed 1965–67 life tables show that lower mortality rates were experienced only at ages 0–14, 28–32 and over 88 for males and at ages 0–13 and over 72 for females.

Age distribution at death

Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first year and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years, and thereafter the five-year groups 5–9 years, 10–14 years, etc. A summary in this form is given for Australia in the following table.

DEATHS, BY AGE AT DEATH AND SEX: AUSTRALIA, 1973

Age at death	*Males*	*Fe-males*	*Per-sons*	*Age at death*	*Males*	*Fe-males*	*Per-sons*
Under 1 week	1,537	1,083	2,620	5– 9 years	270	192	462
1 week and under 2 weeks	87	67	154	10–14 ,,	250	155	405
2 weeks and under 3 weeks	47	39	86	15–19 ,,	900	330	1,230
3 weeks and under 4 weeks	40	27	67	20–24 ,,	1,003	296	1,299
				25–29 ,,	716	291	1,007
Total under 4 weeks	*1,711*	*1,216*	*2,927*	30–34 ,,	632	330	962
				35–39 ,,	821	477	1,298
				40–44 ,,	1,399	755	2,154
4 weeks and under 3 months	244	185	429	45–49 ,,	2,484	1,377	3,861
3 months and under 6 months	227	198	425	50–54 ,,	3,483	1,817	5,300
6 months and under 12 months	174	130	304	55–59 ,,	4,772	2,515	7,287
				60–64 ,,	6,750	3,388	10,138
Total under 1 year	*2,356*	*1,729*	*4,085*	65–69 ,,	7,974	4,241	12,215
				70–74 ,,	8,400	5,933	14,333
1 year	195	161	356	75–79 ,,	7,480	7,331	14,811
2 years	139	85	224	80–84 ,,	6,349	8,149	14,498
3 ,,	101	65	166	85 years and over	5,027	9,549	14,576
4 ,,	78	58	136	Age not stated	9	10	19
Total under 5 years	*2,869*	*2,098*	*4,967*	**Total all ages**	**61,588**	**49,234**	**110,822**

There are different mortality rates at various stages of life, and the actual number of deaths in any period is related to the numbers living at the respective stages. Changes in the number of deaths from one period to another are associated with changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups. The combined effect of various influences, i.e. the decline in the rate of mortality, the long term decline in the birthrate, and the effects of past and present migration on the age distribution of the population, is shown in the following table, which shows the proportion of deaths in various age groups in five-year periods and for the latest available year.

PROPORTION OF DEATHS IN EACH AGE GROUP: AUSTRALIA
(Per cent)

Age at death (years)	*1946–50*	*1951–55*	*1956–60*	*1961–65*	*1966–70*	*1973*		
						Males	*Females*	*Persons*
Under 1 year	6.48	5.77	5.41	4.74	4.06	3.83	3.51	3.69
1– 4 years	1.46	1.48	1.19	0.96	0.81	0.83	0.75	0.80
5–19 ,,	1.89	1.85	1.76	1.76	1.83	2.31	1.38	1.89
20–39 ,,	5.69	5.18	4.64	4.26	4.12	5.15	2.83	4.12
40–59 ,,	18.72	17.54	17.02	17.28	17.37	19.71	13.13	16.79
60–64 ,,	9.61	9.63	8.75	8.74	8.87	10.96	6.88	9.15
65 and over	56.12	58.52	61.20	62.24	62.92	57.20	71.50	63.56
Age not stated	0.03	0.03	0.03	0.02	0.02	0.01	0.02	0.02
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*a*) Excludes particulars of full-blood Aborigines before 1966.

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Year Book No. 39, page 614.

Age-specific death rates

In previous issues of the Year Book, average annual age-specific death rates, i.e. the average number of deaths per 1,000 of population in each age group, were given for each State and Australia for the periods 1932–1934, 1946–1948, 1953–1955, 1960–1962 and 1965–1967 (*see* Year Books, No. 37, pp. 778–9, No. 39, pp. 615–6, No. 44, pp. 640–1, No. 52, p. 253, and No. 55, p. 189). These rates were based on the age distribution of the population at the relevant censuses.

AGE-SPECIFIC DEATH RATES(*a*): 1973

Age group (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(b)*
			MALES				
Under 1(*c*)	19.59	15.29	19.40	16.61	22.83	18.70	18.56
1– 4	0.99	0.83	1.10	1.02	1.08	0.92	0.98
5– 9	0.38	0.51	0.47	0.36	0.38	0.62	0.44
10–14	0.34	0.41	0.59	0.21	0.44	0.23	0.39
15–19	1.35	1.18	2.10	1.67	1.71	1.81	1.52
20–24	1.68	1.54	2.41	1.33	1.99	1.92	1.77
25–29	1.30	1.17	1.65	1.25	1.41	1.34	1.33
30–34	1.44	1.19	1.88	1.26	1.64	1.06	1.46
35–39	2.04	1.99	2.63	1.83	2.13	2.93	2.13
40–44	3.89	3.21	3.95	2.73	3.35	3.76	3.55
45–49	6.28	6.31	6.85	5.38	5.59	6.29	6.21
50–54	10.05	9.28	10.24	9.38	8.74	10.24	9.74
55–59	16.11	15.80	16.76	15.43	13.84	18.52	16.00
60–64	28.17	25.13	26.73	24.57	24.16	25.18	26.36
65–69	43.11	42.31	38.36	41.60	39.27	43.01	41.60
70–74	66.58	66.41	56.84	64.26	62.53	62.96	64.18
75–79	99.55	108.66	90.78	94.46	99.72	99.95	100.06
80–84	148.43	162.45	132.73	146.57	160.13	143.53	149.87
85 and over	231.70	255.35	204.35	234.21	223.76	244.41	233.45
			FEMALES				
Under 1(*c*)	14.42	13.20	15.52	10.27	15.37	18.70	14.32
1– 4	0.64	0.67	1.00	0.67	0.83	0.45	0.73
5– 9	0.31	0.33	0.37	0.26	0.30	0.32	0.33
10–14	0.26	0.28	0.16	0.21	0.27	0.44	0.25
15–19	0.58	0.46	0.76	0.53	0.65	0.48	0.58
20–24	0.55	0.52	0.66	0.40	0.50	0.44	0.54
25–29	0.59	0.58	0.59	0.39	0.53	0.63	0.57
30–34	0.91	0.74	1.08	0.55	0.50	0.85	0.81
35–39	1.35	1.14	1.64	0.88	1.32	1.42	1.30
40–44	2.16	1.89	2.34	1.87	1.70	1.79	2.05
45–49	3.71	3.31	4.57	3.19	3.18	2.92	3.62
50–54	5.32	5.07	5.50	4.57	5.09	4.61	5.16
55–59	8.54	7.99	8.41	6.83	8.38	9.11	8.22
60–64	12.74	12.84	11.71	12.02	13.24	11.53	12.53
65–69	20.45	20.30	17.80	19.00	17.42	18.12	19.60
70–74	34.63	36.23	32.37	32.40	31.08	40.14	34.48
75–79	59.34	60.99	54.56	55.13	57.94	61.18	58.67
80–84	102.82	108.18	100.25	93.91	92.87	106.68	102.55
85 and over	192.12	214.16	178.91	186.67	185.29	190.24	195.58

(*a*) Number of deaths per 1,000 of population in each age group. (*b*) Includes the Australian Capital Territory and the Northern Territory. (*c*) Infant deaths per 1,000 live births registered.

AGE-SPECIFIC DEATH RATES(*a*)(*b*): AUSTRALIA

Age group (years)	*1946–48 (c)*	*1953–55 (c)*	*1960–62 (c)*	*1965–67 (c)*	*1970–72 (c)*	*1970*	*1971*	*1972*	*1973*
					MALES				
Under 1(*d*) .	31.71	25.18	22.36	20.85	19.50	20.60	19.02	18.95	18.56
1– 4 .	2.09	1.69	1.15	1.08	1.00	1.07	0.94	0.99	0.98
5– 9 .	0.92	0.67	0.52	0.45	0.46	0.47	0.47	0.44	0.44
10–14 .	0.77	0.63	0.48	0.46	0.42	0.40	0.46	0.41	0.39
15–19 .	1.41	1.51	1.23	1.33	1.54	1.52	1.58	1.47	1.52
20–24 .	1.73	1.82	1.62	1.67	1.83	1.88	1.88	1.72	1.77
25–29 .	1.69	1.68	1.49	1.48	1.39	1.43	1.47	1.26	1.33
30–34 .	2.02	1.79	1.69	1.64	1.52	1.56	1.59	1.44	1.46
35–39 .	2.66	2.40	2.26	2.45	2.29	2.37	2.34	2.19	2.13
40–44 .	4.12	3.64	3.67	3.82	3.49	3.65	3.37	3.46	3.55
45–49 .	6.86	6.01	5.96	6.14	6.08	6.19	6.12	6.14	6.21
50–54 .	11.39	10.44	10.01	10.45	10.05	10.60	10.02	9.70	9.74
55–59 .	17.58	17.03	16.57	16.96	16.80	17.39	16.81	16.36	16.00
60–64 .	27.43	26.58	26.44	27.59	27.13	27.94	26.44	27.08	26.36
65–69 .	42.42	41.28	41.68	43.66	42.72	45.52	41.98	41.11	41.60
70–74 .	63.69	64.53	63.04	66.84	65.21	67.67	64.76	64.94	64.18
75–79 .	99.65	98.77	94.43	99.77	102.26	107.13	100.60	100.29	100.06
80–84 .	149.31	145.88	141.83	146.95	148.51	153.27	147.97	147.14	149.87
85 and over	253.48	248.14	243.69	241.98	239.96	244.46	240.49	239.04	233.45
					FEMALES				
Under 1(*d*) .	24.96	19.88	17.57	16.35	14.96	15.02	15.48	r14.37	14.32
1– 4 .	1.72	1.35	1.08	1.14	0.79	0.80	0.79	0.77	0.73
5– 9 .	0.64	0.50	0.38	0.34	0.33	0.34	0.32	0.33	0.33
10-14 .	0.52	0.37	0.29	0.27	0.27	0.33	0.22	0.26	0.25
15–19 .	0.70	0.58	0.50	0.54	0.61	0.58	0.68	0.55	0.58
20–24 .	1.08	0.67	0.60	0.63	0.59	0.56	0.65	0.59	0.54
25–29 .	1.50	0.83	0.71	0.72	0.66	0.69	0.67	0.62	0.57
30–34 .	1.77	1.11	0.95	0.98	0.91	0.92	0.95	0.87	0.81
35–39 .	2.42	1.74	1.47	1.54	1.43	1.66	1.38	1.29	1.30
40-44 .	3.31	2.55	2.26	2.31	2.23	2.31	2.26	2.16	2.05
45–49 .	4.92	4.19	3.65	3.86	3.64	3.63	3.79	3.56	3.62
50–54 .	7.63	6.43	5.55	5.87	5.59	5.85	5.54	5.47	5.16
55–59 .	10.46	9.25	8.14	8.67	8.51	8.77	8.47	8.40	8.22
60–64 .	16.52	14.75	13.31	13.56	13.15	13.96	13.04	12.68	12.53
65–69 .	26.17	23.89	21.99	21.94	21.29	22.39	20.50	20.34	19.60
70–74 .	45.84	40.93	37.14	37.47	36.12	35.76	36.65	34.65	34.48
75–79 .	75.14	69.72	63.18	62.37	62.35	64.78	62.62	59 64	58.67
80–84 .	123.46	117.36	105.10	107.93	103.78	108.01	103.65	102.28	102.55
85 and over	222.12	213.69	210.20	119.73	194.37	198.59	197.22	188.82	195.58

(*a*) Number of deaths per 1,000 of population of the same age group and sex. The populations used in the calculation of these rates are based on census populations at 30 June 1947, 1954, 1961, 1966 and 1971. (*b*) Excludes particulars of full-blood Aborigines prior to 1965. (*c*) Average annual rate per 1,000 of census population, based on deaths in the three year period, i.e. census year and the years preceding and following it. (*d*) Infant deaths per 1,000 live births registered.

Infant deaths and death rates—States and Territories

The next table shows for each State and Territory the number of deaths under one year of age and the rates of infant mortality under one year. Rates for Australia and the more populous countries of the world for the latest available year are shown in the table International Vital Statistics at the end of this Chapter.

INFANT MORTALITY UNDER ONE YEAR(*a*)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Annual average—									
1946–50	1,990	1,129	770	431	370	187	11	14	4,902
1951–55	1,852	1,113	730	407	384	184	17	14	4,701
1956–60	1,770	1,205	717	410	362	176	25	18	4,683
1961–65	1,685	1,168	696	408	350	156	28	34	4,524
1966–70	1,567	1,071	669	354	393	127	117	51	4,349
Annual total—									
1970	1,743	1,060	672	367	459	116	126	61	4,604
1971	1,710	1,107	766	366	464	114	170	80	4,777
1972	1,663	1,048	697	367	348	127	113	67	4,430
1973	1,491	958	666	276	394	137	100	63	4,085
1974	1,428	989	606	312	327	123	103	70	3,958
Annual average rate(*b*)—									
1946–50	28.91	23.82	27.49	26.50	28.15	26.53	37.37	19.89	26.98
1951–55	25.11	20.70	23.58	22.55	24.41	23.67	36.28	15.40	23.34
1956–60	22.24	19.67	20.99	20.50	21.42	20.62	36.00	13.68	21.05
1961–65	20.32	17.92	19.69	19.07	20.73	18.46	30.76	17.80	19.42
1966–70	18.99	15.57	18.90	16.60	20.25	15.94	54.91	18.25	18.10
Annual rate(*b*)—									
1970	19.71	14.52	17.91	16.23	21.23	14.17	48.02	17.55	17.88
1971	17.37	14.66	19.16	15.92	19.14	13.70	60.03	19.80	17.29
1972	17.45	14.59	17.76	16.80	15.69	16.23	41.51	16.48	16.72
1973	17.07	14.27	17.50	13.52	19.21	18.70	35.60	15.83	16.49
1974	16.57	14.94	16.01	15.46	16.18	16.63	36.68	16.03	16.14

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) Number of deaths of children aged under one year per 1,000 live births registered.

Because of the smallness of the numbers of these deaths occurring in the Australian Capital Territory and the Northern Territory, the rates for these Territories (i.e. number of such deaths per thousand live births) are subject to considerable fluctuation.

Infant deaths and death rates—Australia

The fact that out of 664,335 male infants born from 1969 to 1973, 12,919 (19.45 per 1,000) died during the first year of life, while of 632,358 female infants only 9,459 (14.96 per 1,000) died during the first year, accords with the universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births. Stillbirths, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life, or the post-neonatal period.

INFANT DEATHS AND MORTALITY RATES(*a*): AUSTRALIA

Period	Age at death											Total under one year		
	Days		Total under one week	Weeks			Total under four weeks	Months						
	Under 1	1–6		1	2	3		1–2 (*b*)	3–5	6–8	9–11	Males	Females	Persons
Annual average—														
1946–50	1,717	1,297	3,014	259	138	103	3,514	404	415	318	251	2,808	2,094	4,902
1951–55	1,631	1,250	2,881	237	109	86	3,313	396	431	316	245	2,683	2,018	4,701
1956–60	1,737	1,195	2,932	221	116	84	3,353	398	457	271	204	2,662	2,021	4,683
1961–65	1,709	1,187	2,896	191	102	71	3,260	426	417	245	176	2,596	1,928	4,524
1966–70	1,696	1,125	2,821	160	88	72	3,141	407	420	226	155	2,515	1,834	4,349
Annual total—														
1969	1,755	1,151	2,906	155	110	69	3,240	407	432	241	162	2,584	1,898	4,482
1970	1,857	1,150	3,007	160	90	71	3,328	459	454	215	148	2,718	1,886	4,604
1971	1,907	1,121	3,028	177	85	74	3,364	488	494	250	181	2,684	2,093	4,777
1972	1,924	954	2,878	141	89	67	3,175	456	450	223	126	2,577	1,853	4,430
1973	1,718	902	2,620	154	86	67	2,927	429	425	195	109	2,356	1,729	4,085
Annual average rate(*c*)—														
1946–50	9.45	7.14	16.59	1.43	0.76	0.56	19.34	2.22	2.29	1.75	1.38	30 08	23.70	26.98
1951–55	8.09	6.20	14.29	1.18	0 54	0.43	16.44	1.97	2.14	1.57	1.22	25.99	20.56	23.34
1956–60	7.81	5.37	13.18	0.99	0.52	0.38	15.07	1.79	2.06	1.22	0.92	23.29	18.69	21.05
1961–65	7.34	5.09	12.43	0.82	0.44	0.30	13.99	1.83	1.79	1.05	0.76	21.67	17.03	19.42
1966–70	7.06	4.68	11.74	0.66	0.37	0.30	13.07	1.69	1.75	0.94	0.65	20.40	15.67	18.10
Annual rate(*c*)—														
1969	7.02	4.60	11.62	0.61	0.44	0.28	12.95	1.63	1.73	0.96	0.65	20 14	15.57	17.92
1970	7.21	4.47	11.68	0.62	0.35	0.27	12.92	1.78	1.76	0.84	0.58	20.60	15.02	17.88
1971	6.90	4.06	10.96	0.64	0.31	0.27	12.17	1.77	1.78	0.90	0.65	19.02	15.48	17.29
1972	7.26	3.60	10.86	0.53	0.34	0.25	11.98	1.72	1.70	0.84	0.48	18.95	14.37	16.72
1973	6.94	3.64	10.58	0.62	0.35	0.27	11.82	1.73	1.72	0.79	0.44	18.56	14.32	16.49

(*a*) Excludes particulars of full-blood Aborigines before 1966. (*b*) Age four weeks and under three months. (*c*) Number of deaths of children aged under one year per 1,000 live births registered.

Plate 31 below, shows infant mortality rates for each year from 1910 to 1973.

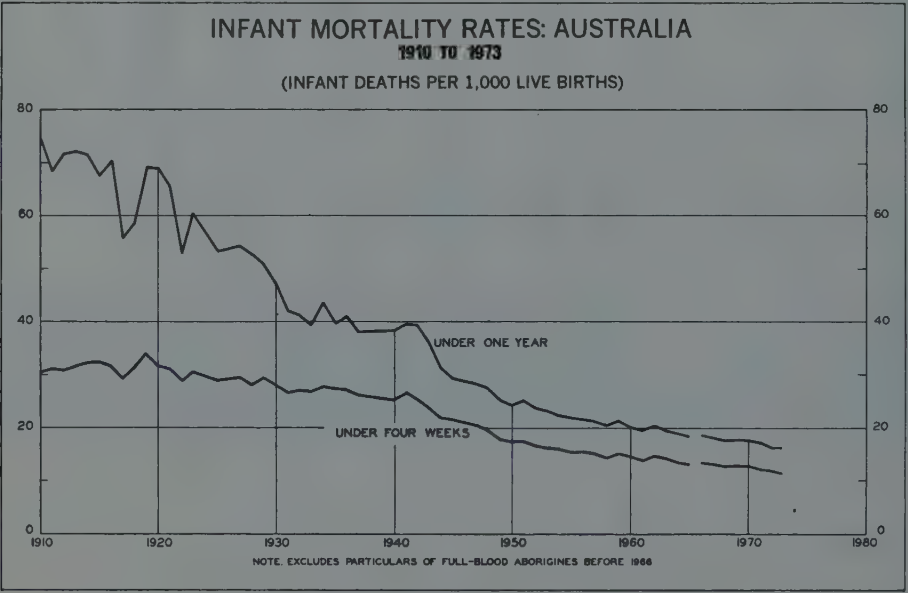


PLATE 31

Causes of death

Causes of death in Australia are classified according to the International Classification of Diseases (I.C.D.) produced by the World Health Organization. The classification is periodically revised and in Australia the Eighth Revision was adopted for use from 1968. Hence, cause of death figures for 1968 and subsequent years are not strictly comparable, for some causes, with those for 1967 and earlier years.

The following two tables show the number of deaths in 1973 according to the Abbreviated List of 50 causes for tabulation of mortality recommended by W.H.O. with some large categories sub-divided to show further details. Table A shows the total number of males and females who died, the death rates per million of mean population, and the percentage of total deaths. Table B shows deaths for males and females, classified by age groups. More detailed data on causes of death will be found in the bulletin *Causes of Death* (4.7), No. 10.

A. CAUSES OF DEATH: NUMBERS, PROPORTIONS AND CRUDE RATES(*a*), MALES AND FEMALES, AUSTRALIA, 1973

ABBREVIATED LIST OF 50 CAUSES WITH CERTAIN SUB-DIVISIONS

		Males			*Females*		
Cause of death	*ICD numbers*	*Number of deaths*	*Percentage of total*	*Crude rates(a)*	*Number of deaths*	*Percentage of total*	*Crude rates(a)*
B 1 Cholera	000	..	..	..	..	..	..
B 2 Typhoid fever	001	..	..	..	..	..	..
B 3 Bacillary dysentery and amoebiasis	004, 006	2	(*b*)	(*c*)	4	(*b*)	1
B 4 Enteritis and other diarrhoeal diseases	008, 009	145	0.2	22	150	0.3	23
B 5 Tuberculosis of respiratory system	010–012	64	0.1	10	21	(*b*)	3
B 6 Other tuberculosis, including late effects	013–019	29	(*b*)	4	12	(*b*)	2
B 7 Plague	020	..	..	..	..	..	..
B 8 Diphtheria	032	2	(*b*)	(*c*)	1	(*b*)	(*c*)
B 9 Whooping cough	033	..	..	..	2	(*b*)	(*c*)
B10 Streptococcal sore throat and scarlet fever	034	..	..	..	..	..	..
B11 Meningococcal infection	036	15	(*b*)	2	5	(*b*)	1
B12 Acute poliomyelitis	040–043	..	..	..	..	..	..
B13 Smallpox	050	..	..	..	..	..	..
B14 Measles	055	2	(*b*)	(*c*)	4	(*b*)	1
B15 Typhus and other rickettsioses	080–083	..	..	..	..	..	..
B16 Malaria	084	..	..	..	..	..	..
B17 Syphilis and its sequelae	090–097	8	(*b*)	1	10	(*b*)	2
B18 All other infective and parasitic diseases	Remainder of 000–136	180	0.3	27	130	0.3	20
B19 Malignant neoplasms—							
(i) Digestive organs	150–159	3,341	5.4	505	2,978	6.0	454
(ii) Lung	162	3,079	5.0	466	564	1.1	86
(iii) Skin	172, 173	311	0.5	47	202	0.4	31
(iv) Breast	174	15	(*b*)	2	1,607	3.3	245
(v) Genital organs	180–187	1,133	1.8	171	1,190	2.4	181
(vi) Urinary organs	188, 189	545	0.9	82	320	0.6	49
(vii) Leukaemia and aleukaemia	204–207	452	0.7	68	325	0.7	50
(viii) Other malignant and lymphatic neoplasms	Remainder of 140–209	1,900	3.1	287	1,434	2.9	219
Total, B19		*10,776*	*17.5*	*1,630*	*8,620*	*17.5*	*1,314*
B20 Benign neoplasms and neoplasms of unspecified nature	210–239	101	0.2	15	106	0.2	16
B21 Diabetes mellitus	250	828	1.3	125	963	2.0	147
B22 Avitaminoses and other nutritional deficiency	260–269	48	0.1	7	38	0.1	6
B23 Anaemias	280–285	89	0.1	13	127	0.3	19
B24 Meningitis	320	55	0.1	8	33	0.1	5
B25 Active rheumatic fever	390–392	5	(*b*)	1	9	(*b*)	1
B26 Chronic rheumatic heart disease	393–398	361	0.6	55	411	0.8	63
B27 Hypertensive disease	400–404	621	1.0	94	843	1.7	129
B28 Ischaemic heart disease	410–414	19,810	32.2	2,997	13,178	26.8	2,009
B29 Other forms of heart disease	420–429	2,040	3.3	309	2,475	5.0	377
B30 Cerebrovascular disease	430–438	6,581	10.7	996	9,351	19.0	1,426
B31 Influenza	470–474	80	0.1	12	70	0.1	11
B32 Pneumonia	480–486	1,413	2.3	214	1,203	2.4	183
B33 Bronchitis, emphysema and asthma	490–493	3,290	5.3	498	827	1.7	126
B34 Peptic ulcer	531–533	423	0.7	64	198	0.4	30
B35 Appendicitis	540–543	32	0.1	5	44	0.1	7
B36 Intestinal obstruction and hernia	550–553, 560	188	0.3	28	209	0.4	32
B37 Cirrhosis of liver	571	655	1.1	99	272	0.6	41
B38 Nephritis and nephrosis	580–584	384	0.6	58	342	0.7	52
B39 Hyperplasia of prostate	600	212	0.3	32	..	..	..
B40 Abortion	640–645	..	..	..	1	(*b*)	(*c*)

For footnotes *see* end of table next page.

A. CAUSES OF DEATH: NUMBERS, PROPORTIONS AND CRUDE RATES(*a*), MALES AND FEMALES, AUSTRALIA, 1973—*continued*

ABBREVIATED LIST OF 50 CAUSES WITH CERTAIN SUB-DIVISIONS—*continued*

Cause of death	*ICD numbers*	*Males* *Number of deaths*	*Percentage of total*	*Crude rates(a)*	*Females* *Number of deaths*	*Percentage of total*	*Crude rates(a)*
B41 Other complications of pregnancy, childbirth and the puerperium. Delivery without mention of complication	630–639, 650–678	..	..	..	27	0.1	4
B42 Congenital anomalies	740–759	627	1.0	95	567	1.2	86
B43 Birth injury, difficult labour and other anoxic and hypoxic conditions	764–768, 772, 776	382	0.6	58	220	0.4	34
B44 Other causes of perinatal mortality	Remainder of 760–779	887	1.4	134	660	1.3	101
B45 Symptoms and ill-defined conditions	780–796	499	0.8	75	440	0.9	67
B46 (i) Arteriosclerosis	440	957	1.6	145	1,424	2.9	217
(ii) Other diseases of circulatory system	441–448, 450–458	1,182	1.9	179	763	1.5	116
(iii) Other diseases of respiratory system	460–466, 500–508, 510–519	444	0.7	67	310	0.6	47
(iv) All other diseases	Remainder of 240–738	2,205	3.6	334	2,354	4.8	359
Total, B46		*4,788*	*7.8*	*724*	*4,851*	*9.9*	*740*
BE47 Motor vehicle accidents	E810–E823	2,822	4.6	427	1,003	2.0	153
BE48 All other accidents	E800–E807, E825–E949	1,829	3.0	277	1,151	2.3	175
BE49 Suicide and self-inflicted injuries	E950–E959	1,036	1.7	157	492	1.0	75
BE50 All other external causes	E960–E999	279	0.5	42	164	0.3	25
All causes		61,588	100.0	9,317	49,234	100.0	7,507

(*a*) Number of deaths per million of estimated mean population. (*b*) Less than 0.05. (*c*) Less than 0.5.

B CAUSES OF DEATH: MALES AND FEMALES IN AGE GROUPS, AUSTRALIA, 1973

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE EIGHTH REVISION OF THE INTERNATIONAL LIST)

Cause of death(a)	*Sex*	*Number of deaths in age groups (years)* *Under 1*	*1–4*	*5–14*	*15–24*	*25-34*	*35–44*	*45–54*	*55–64*	*65–74*	*75 and over*	*Not stated*	*Total*
B 3 Bacillary dysentery and amoebiasis	M	2	..	..	..	..	..	..	..	..	..	..	2
	F	1	..	..	..	..	..	..	..	2	1	..	4
B 4 Enteritis and other diarrhoeal diseases	M	45	23	3	3	1	4	3	8	23	32	..	145
	F	42	25	2	..	1	..	3	6	15	56	..	150
B 5 Tuberculosis of respiratory system	M	..	..	..	..	..	3	9	20	19	13	..	64
	F	..	..	..	..	1	2	3	4	3	8	..	21
B 6 Other tuberculosis, including late effects	M	1	..	..	..	..	2	6	9	6	5	..	29
	F	..	..	..	..	..	2	3	2	2	3	..	12
B 8 Diphtheria	M	1	..	..	1	..	..	..	..	..	..	..	2
	F	..	1	..	..	..	..	..	..	..	..	..	1
B 9 Whooping cough	F	2	..	..	..	..	..	..	..	..	..	..	2
B11 Meningococcal infection	M	7	..	..	..	1	3	3	1	..	..	..	15
	F	1	3	..	..	..	..	..	..	..	1	..	5
B14 Measles	M	..	1	..	..	..	..	..	1	..	..	..	2
	F	..	4	..	..	..	..	..	..	..	..	..	4
B17 Syphilis and its sequelae	M	..	..	..	..	..	..	..	2	1	5	..	8
	F	2	..	..	..	..	..	1	2	4	1	..	10
B18 All other infective and parasitic diseases	M	33	11	9	9	13	15	17	28	24	21	..	180
	F	20	9	8	5	7	1	11	20	15	34	..	130
B19 Malignant neoplasms—													
(i) Digestive organs	M	..	..	2	3	27	99	339	797	1,099	975	..	3,341
	F	1	..	..	2	30	85	288	533	791	1,248	..	2,978
(ii) Lung	M	..	..	..	..	4	57	391	877	1,161	588	1	3,079
	F	..	..	..	..	3	22	90	180	153	116	..	564
(iii) Skin	M	..	1	..	11	19	27	50	75	66	62	..	311
	F	..	..	..	8	12	16	46	39	39	42	..	202
(iv) Breast	M	..	..	..	..	..	1	1	5	4	4	..	15
	F	..	..	..	..	21	124	322	395	357	388	..	1,607
(v) Genital organs	M	..	..	..	12	17	13	22	115	388	566	..	1,133
	F	..	..	..	8	16	44	211	319	305	287	..	1,190
(vi) Urinary organs	M	..	3	3	1	2	5	56	122	197	156	..	545
	F	..	5	3	1	1	4	28	61	86	131	..	320
(vii) Leukaemia and aleukaemia	M	3	23	39	25	21	29	49	70	102	91	..	452
	F	2	14	31	19	17	12	31	53	55	91	..	325
(viii) Other malignant and lymphatic neoplasms	M	6	25	40	46	73	111	280	477	513	329	..	1,900
	F	1	15	26	28	36	67	174	323	377	387	..	1,434
Total, B19	*M*	*9*	*52*	*84*	*98*	*163*	*342*	*1,188*	*2,538*	*3,530*	*2,771*	*1*	*10,776*
	F	*4*	*34*	*60*	*66*	*136*	*374*	*1,190*	*1,903*	*2,163*	*2,690*	..	*8,620*

For footnote *see* end of table next page.

B. CAUSES OF DEATH: MALES AND FEMALES IN AGE GROUPS, AUSTRALIA, 1973—*continued*

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE EIGHTH REVISION OF THE INTERNATIONAL LIST)

	Cause of death(a)	*Sex*	*Number of deaths in age groups (years)*											
			Under 1	*1–4*	*5–14*	*15–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65–74*	*75 and over*	*Not stated*	*Total*
B20	Benign neoplasms and neoplasms of unspecified nature	M	2	..	4	7	6	5	15	25	22	15	..	101
		F	2	2	1	4	3	10	17	23	18	26	..	106
B21	Diabetes mellitus	M	1	..	..	1	6	20	47	159	289	305	..	828
		F	..	1	3	5	13	18	39	122	289	473	..	963
B22	Avitaminoses and other nutritional deficiency	M	3	1	..	..	..	1	2	9	15	17	..	48
		F	1	..	..	1	1	..	2	3	6	24	..	38
B23	Anaemias	M	1	1	1	3	2	3	2	7	16	53	..	89
		F	1	2	1	3	..	3	4	9	23	81	..	127
B24	Meningitis	M	30	6	3	..	2	4	..	3	5	2	..	55
		F	11	2	2	3	1	..	4	4	4	2	..	33
B25	Active rheumatic fever	M	..	..	2	..	1	..	..	..	2	..	..	5
		F	..	1	..	1	1	..	1	1	2	2	..	9
B26	Chronic rheumatic heart disease	M	..	..	..	3	14	24	59	110	85	66	..	361
		F	..	..	2	2	7	19	51	87	111	132	..	411
B27	Hypertensive disease	M	..	..	..	..	1	13	51	112	189	255	..	621
		F	..	..	..	..	2	16	51	78	159	537	..	843
B28	Ischaemic heart disease	M	..	..	..	4	55	534	2,244	4,803	6,180	5,989	1	19,810
		F	..	..	..	1	18	120	499	1,566	3,453	7,517	4	13,178
B29	Other forms of heart disease	M	7	3	5	18	24	52	109	222	437	1,162	1	2,040
		F	4	6	4	9	16	29	53	114	368	1,871	1	2,475
B30	Cerebrovascular disease	M	1	3	3	14	31	119	418	938	1,957	3,097	..	6,581
		F	4	1	8	12	33	130	353	741	1,799	6,268	2	9,351
B31	Influenza	M	4	4	1	1	..	3	5	12	22	28	..	80
		F	2	..	1	1	1	1	4	3	15	42	..	70
B32	Pneumonia	M	108	30	4	14	20	48	119	149	274	647	..	1,413
		F	91	25	7	9	13	21	50	65	147	775	..	1,203
B33	Bronchitis, emphysema and asthma	M	1	9	19	10	6	23	179	556	1,160	1,326	1	3,290
		F	1	2	7	19	14	34	94	149	222	285	..	827
B34	Peptic ulcer	M	..	..	..	1	4	12	49	97	119	141	..	423
		F	..	..	..	..	2	8	13	27	48	100	..	198
B35	Appendicitis	M	..	1	..	1	2	3	5	7	5	8	..	32
		F	..	1	1	3	1	3	3	3	9	20	..	44
B36	Intestinal obstruction and hernia	M	35	2	..	2	4	2	8	28	34	73	..	188
		F	11	..	1	..	1	3	13	19	49	112	..	209
B37	Cirrhosis of liver	M	..	5	2	1	16	74	192	213	112	40	..	655
		F	..	..	1	1	8	32	83	79	49	18	1	272
B38	Nephritis and nephrosis	M	2	1	3	2	14	14	38	80	125	105	..	384
		F	..	..	1	4	6	23	66	70	75	97	..	342
B39	Hyperplasia of prostate	M	..	..	..	..	..	..	2	9	45	156	..	212
B40	Abortion	F	..	..	..	1	..	..	..	..	..	..	..	1
B41	Other complications of pregnancy, childbirth and the puerperium. Delivery without mention of complication	F	..	..	..	7	12	8	..	..	..	..	..	27
B42	Congenital anomalies	M	436	65	35	17	11	8	13	24	12	6	..	627
		F	406	48	28	14	14	10	12	18	3	14	..	567
B43	Birth injury, difficult labour and other anoxic and hypoxic conditions	M	377	5	..	..	..	..	..	..	..	..	..	382
		F	217	1	2	..	..	..	..	..	..	..	..	220
B44	Other causes of perinatal mortality	M	886	1	..	..	..	..	..	..	..	..	..	887
		F	659	..	..	1	..	..	..	..	..	..	..	660
B45	Symptoms and ill-defined conditions	M	169	10	4	21	28	22	36	40	38	128	3	499
		F	114	8	3	12	10	14	10	21	37	209	2	440
B46	(i) Arteriosclerosis	M	..	..	..	..	..	2	6	31	174	744	..	957
		F	..	..	..	..	..	1	4	15	121	1,283	..	1,424
	(ii) Other diseases of circulatory system	M	2	1	..	5	11	23	67	221	396	456	..	1,182
		F	1	..	3	6	9	17	34	87	173	433	..	763
	(iii) Other diseases of respiratory system	M	90	17	8	5	1	13	27	55	88	140	..	444
		F	47	7	7	1	8	10	25	25	29	151	..	310
	(iv) All other diseases	M	30	34	50	73	64	125	301	379	528	621	..	2,205
		F	23	29	45	40	62	98	201	369	495	992	..	2,354
	Total, B46	*M*	*122*	*52*	*58*	*83*	*76*	*163*	*401*	*686*	*1,186*	*1,961*	..	*4,788*
		F	*71*	*36*	*55*	*47*	*79*	*126*	*264*	*496*	*818*	*2,859*	..	*4,851*
BE47	Motor vehicle accidents	M	6	64	170	1,119	427	263	246	242	175	109	1	2,822
		F	10	58	97	255	83	75	110	98	103	114	..	1,003
BE48	All other accidents	M	64	155	96	246	208	200	231	209	150	270	..	1,829
		F	49	91	44	39	31	40	49	66	105	637	..	1,151
BE49	Suicide and self-inflicted injuries	M	..	..	4	171	155	199	214	145	104	43	1	1,036
		F	..	..	..	71	75	86	111	87	47	15	..	492
BE50	All other external causes	M	3	8	10	53	57	42	56	30	13	7	..	279
		F	3	8	8	30	31	24	27	17	11	5	..	164
	All causes	M	2,356	513	520	1,903	1,348	2,220	5,967	11,522	16,374	18,856	9	61,588
		F	1,729	369	347	626	621	1,232	3,194	5,903	10,174	25,029	10	49,234

(*a*) Categories of the Abbreviated List for which no deaths were recorded in 1973 have been omitted from this table. For deaths of such categories ***see*** Table **A, pages** 199–200.

Causes of death—children under one year

Causes of death of children under one year of age should be considered in relation to age at death because the emphasis on various causes changes rapidly as age at death varies, the majority of deaths in the first week of life being due to conditions arising during pregnancy and birth. A summary for 1973, of deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE, BY CAUSE OF DEATH AUSTRALIA, 1973

International Classification of Diseases number	*Cause of death*	*Age at death*										
		Days		*Total under one week*	*Weeks*			*Total under four weeks*	*Months*			*Total under one year*
		Under 1	*1–6*		*1*	*2*	*3*		*1–2 (a)*	*3–5*	*6–11*	
760	Chronic circulatory and genito-urinary diseases in mother	14	4	18	1	..	..	19	..	..	..	19
761	Other maternal conditions unrelated to pregnancy	66	32	98	..	5	2	105	1	..	..	106
762	Toxaemias of pregnancy	62	42	104	1	..	..	105	..	..	..	105
763	Maternal ante and intrapartum infection	21	7	28	5	..	..	33	..	..	..	33
764–768	Difficult labour	79	46	125	1	3	1	130	2	..	..	132
769	Other complications of pregnancy and childbirth	441	159	600	10	4	..	614	2	..	..	616
770	Conditions of placenta	230	93	323	10	2	..	335	..	..	..	335
771	Conditions of umbilical cord	24	8	32	..	..	..	32	..	..	..	32
772, 773	Birth injury without mention of cause	19	30	49	3	1	1	54	1	1	..	56
774, 775	Haemolytic disease of newborn	32	9	41	1	1	..	43	1	..	..	44
776	Anoxic and hypoxic conditions not elsewhere classified	217	168	385	9	6	2	402	4	1	..	407
777	Immaturity unqualified	168	38	206	5	..	..	211	2	..	..	213
778, 779	Other conditions of newborn	22	11	33	2	1	1	37	2	2	..	41
740–759	Congenital anomalies	268	185	453	77	37	23	590	110	71	71	842
000–136	Infections	3	13	16	8	5	6	35	29	47	46	157
480–486	Pneumonia	6	12	18	3	9	8	38	57	74	30	199
(*b*)	Other diseases	38	42	80	17	8	16	121	182	193	117	613
E911–E913	Inhalation or ingestion of food or other object causing obstruction or suffocation, and accidental mechanical suffocation	1	2	3	..	1	5	9	31	24	15	79
(*c*)	Other external causes	7	1	8	1	3	2	14	5	12	25	56
	All causes	**1,718**	**902**	**2,620**	**154**	**86**	**67**	**2,927**	**429**	**425**	**304**	**4,085**

(*a*) Age four weeks and under 3 months. (*b*) 140–474, 490–738, 780–796. (*c*) E800–E910, E914–E999.

Deaths from certain important causes

As can be seen from the preceding tables, infective and parasitic diseases (Nos B1–B18) no longer cause many deaths in Australia, being responsible for only 0.7 per cent of total deaths. Of far greater importance are diseases of the circulatory system causing 54.2 per cent, malignant neoplasms causing 15.9 per cent and accidents, poisonings and violence causing 7.9 per cent of all deaths in 1973.

Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues (*B19*). Deaths classified under this heading according to the Sixth, Seventh and Eighth Revisions of the International List (used in Australia for deaths registered since 1950) are not directly comparable in total with those on the Fifth Revision basis (*see* Year Book No. 39, p. 628).

The most common sites of malignant neoplasms causing death in 1973 are identified in Table B (pages 200–1). Malignant neoplasms are predominantly diseases of advanced age, but leukaemia and aleukaemia frequently cause death at early ages.

Deaths in age groups and age-specific death rates for males and females who died from malignant neoplasms are given in the table on the following page.

DEATHS AND DEATH RATES FROM MALIGNANT NEOPLASMS(*a*), BY AGE GROUP AND SEX AUSTRALIA (*b*)

	1953				*1963*				*1973*			
	Number		*Rate(c)*		*Number*		*Rate(c)*		*Number*		*Rate(c)*	
Age group (years)	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Under 15 . . .	113	94	9	8	136	88	8	6	145	98	8	5
15–29	125	88	13	10	134	127	11	11	173	118	10	7
30–44	318	404	32	43	411	548	36	51	430	458	35	40
45–54	635	721	124	152	923	973	145	158	1,188	1,190	157	162
55–64	1,368	1,249	361	307	1,870	1,369	414	303	2,538	1,903	458	330
65 and over . .	3,411	2,981	1,044	748	4,493	3,703	1,135	689	6,301	4,853	1,366	756
Total . .	**5,970**	**5,537**	**134**	**127**	**7,968** (*d*)	**6,808**	**145**	**126**	**10,776** (*d*)	**8,620**	**163**	**131**

(*a*) Includes neoplasms of lymphatic and haematopoietic tissues. (*b*) Excludes particulars of full-blood Aborigines prior to 1967. (*c*) Number of deaths per 100,000 of population at risk. For the individual age groups, the population at risk is that estimated at 30 June. For the total of all ages, the population at risk is the calendar year mean population. (*d*) Includes 1 male, age not stated.

Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries as shown in the 1973 United Nations Demographic Year Book are as follows: Israel (1972) 117.2; Japan (1972) 120.4; South Africa (white population) (1970) 137.0; Poland (1972) 144.1; Australia (1972) 145.0; Canada (1972) 147.9; United States of America (1971) 160.6; Italy (1970) 179.1; Netherlands (1971) 194.8; France (1970) 207.4; England and Wales (1972) 242.6; Scotland (1972) 247.9.

Diseases of the circulatory system (*B25–B30, part B46*). This class is the largest among causes of death, representing 54 per cent of total deaths in 1973. The following table shows the number of deaths and death rates per 100,000 of mean population from diseases of the circulatory system for the years 1950–73. Comparability of the figures is not significantly affected by the various revisions of the International Classification of Diseases.

DEATHS AND DEATH RATES FROM DISEASES OF THE CIRCULATORY SYSTEM BY SEX: AUSTRALIA (*a*)

	Cerebrovascular disease				*Heart disease(b)*				*Other diseases of circulatory system*				*Total*			
	Number		*Rate(c)*		*Number*		*Rate(c)*		*Number*		*Rate(c)*		*Number*		*Rate(c)*	
Year	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
1950 .	4,035	5,351	98	132	14,687	10,256	356	253	1,736	1,802	42	44	20,458	17,409	496	429
1955 .	4,811	6,224	103	137	16,382	11,303	352	249	1,843	1,886	40	42	23,036	19,413	495	427
1960 .	5,183	6,659	100	131	18,654	13,173	359	259	2,068	1,970	40	39	25,905	21,802	499	429
1965 .	5,809	7,835	101	139	21,843	15,546	381	275	2,029	2,071	35	37	29,681	25,452	517	450
1970 .	6,508	9,178	103	148	23,639	17,269	376	278	2,266	2,516	36	40	32,413	28,963	515	466
1971 .	6,497	9,234	101	145	22,980	17,176	358	270	2,271	2,454	35	39	31,748	28,864	494	454
1972 .	6,621	9,148	101	142	22,769	16,673	349	258	2,187	2,336	34	36	31,577	28,157	484	436
1973 .	6,581	9,351	100	143	22,584	16,643	342	254	2,392	2,460	36	38	31,557	28,454	477	434

(*a*) Excludes particulars of full-blood Aborigines prior to 1967. (*b*) Includes hypertensive heart disease. (*c*) Per 100,000 of mean population.

As can be seen from Table B (page 201), these conditions predominantly affect people of advanced age, only 9.1 per cent of deaths being at ages under 55 years in 1973.

Accidents, poisonings and violence (*BE47 to BE50*). Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accidents, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; injuries undetermined whether accidentally or purposely inflicted; and injury resulting from operations of war, including delayed effects.

While not as numerically important as the above two groups in total this class of causes of death has a much greater influence at the younger ages, being responsible for 75 per cent of all deaths at ages 15–24 years in 1973.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population, indicates that the death rate from violence is between two and three times as great for males as for females. The low level of the rates and proportions for the years 1941–45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July 1947 deaths of defence personnel from accidents, etc., have again been included.

ACCIDENTS, POISONINGS, AND VIOLENCE: DEATH RATES(*a*), BY SEX AUSTRALIA

	Death rate from—										*All external causes as a percentage of total deaths*	
	Motor vehicle accidents		*Suicide*		*Homicide(c)*		*Other external causes(d)*		*All external causes*			
Period	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
1941-45 .	19	5	11	5	1	1	48	21	79	31	7.30	3.48
1946-50 .	30	6	14	5	1	1	46	21	91	33	8.44	3.83
1951-55 .	38	9	15	5	2	1	44	22	99	37	9.64	4.53
1956-60 .	37	11	17	6	2	1	38	20	93	39	9.57	4.95
1961-65 .	38	13	19	9	2	1	34	19	93	42	9.54	5.50
1966-70 .	43	15	17	9	2	1	33	20	95	45	9.61	5.71
1967 . .	42	14	19	11	2	1	35	20	98	47	10.08	6.11
1968 . .	43	14	17	8	2	1	34	21	95	45	9.43	5.51
1969 . .	44	16	17	8	2	1	30	18	92	43	9.54	5.65
1970 . .	46	17	17	8	2	1	32	19	97	45	9.67	5.58
1971 . .	45	15	18	9	2	1	31	18	96	44	10.09	5.61
1972 . .	40	15	17	8	2	1	32	18	91	42	9.71	5.62
1973 . .	43	15	16	8	2	2	30	18	90	43	9.69	5.71

(*a*) Number of deaths per 100,000 of mean population. (*b*) Excludes particulars of full-blood Aborigines before 1967. (*c*) Includes deaths from injury purposely inflicted by other persons (not in war) and legal intervention. (*d*) Includes deaths from injury undetermined whether accidentally or purposely inflicted.

In 1973 the total number of deaths from *accidental causes* (*BE47*, *BE48*) was 6,805 (4,651 males and 2,154 females). Over half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows: Motor vehicle traffic accidents, 3,694 (54.28 per cent); motor vehicle non-traffic accidents, 131 (1.93 per cent); other road vehicle accidents, 46 (0.68 per cent); railway accidents, 75 (1.10 per cent); water transport accidents, 108 (1.59 per cent); aircraft accidents, 28 (0.41 per cent); a total of 4,082 (59.99 per cent). Other important causes were accidental falls, 1,153 (16.94 per cent); accidental drowning (not in transport), 437 (6.42 per cent); accidents caused by fires and flames, 174 (2.56 per cent); and accidental poisonings, 113 (1.66 per cent).

Deaths from *suicide* (*BE49*) in 1973 numbered 1,528 (males, 1,036; females, 492). Poisoning, other than by gases, occurred in 546 cases (35.73 per cent of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows: firearms and explosives, 407 (26.64 per cent); poisoning by gases, 207 (13.55 per cent); hanging or strangulation 166 (10.86 per cent); submersion (drowning), 60 (3.93 per cent); other than unspecified modes, 142 (9.29 per cent). Of the 1,036 males who committed suicide, 376 (36.29 per cent) used firearms or explosives. For females the most common mode was poisoning (other than by gases). This was used in 307 cases (62.40 per cent).

Of the 443 deaths assigned in 1973 to all other external causes (*BE50*), there were 253 deaths from homicide and injury purposely inflicted by other persons, 3 deaths from legal intervention by firearms, 184 deaths from injury indetermined whether accidentally or purposely inflicted (of which 75 were due to poisoning other than by gases) and 3 deaths from late effects of injury due to operations of war.

Vital statistics of External Territories

The following table shows, for the year 1974, the number of marriages, births and deaths registered in the External Territories under the control of Australia. More detailed information will be found in *Demography*, Bulletin No. 86.

EXTERNAL TERRITORIES: VITAL STATISTICS, 1974

Territory	*Marriages*	*Births*	*Deaths*
Christmas Island	12	32	4
Cocos (Keeling) Islands	1	12	6
Norfolk Island	20	16	11

International vital statistics

Vital statistics rates for selected countries with relatively complete civil registration data are shown in the following table. The source of this information is the United Nations *Demographic Yearbook*. The yearbook contains rates for most countries and identifies the qualifications of the data applicable to different countries. The crude marriage, birth and death rates shown represent the number of 'events' per 1,000 of the population. Infant mortality rates are the number of deaths which occurred under one year of age per 1,000 live births. An explanation of the meaning of 'expectation of life at birth' is shown on page 193.

VITAL STATISTICS RATES: CERTAIN COUNTRIES—LATEST AVAILABLE YEAR(*a*)

(*Source:* United Nations *Demographic Yearbook*, 1973)

		Rates(a)					*Expectation of life at birth*	
Country	*Year*	*Marriage*	*Birth*	*Death*	*Infant mortality*	*Year*	*Male*	*Female*
Australia	**1973**	**8.6**	**18.8**	**8.4**	**16.5**	**1973**	**68.2**	**75.2**
Canada	1973	8.9	15 5	7.4	16.8	1965–67	68.8	75.2
Czechoslovakia	1973	9.7	18.8	11.5	21.2	1970	66.2	72.9
France	1973	7.7	16.4	10.7	12.9	1971	68.5	76.1
Germany, Federal Republic of	1972	6.7	11.4	11.8	20.4	1968–70	67.2	73.4
Greece	1972	7.1	15.5	8.6	27.8	1960–62	67.5	70.7
Hungary	1973	9.8	15.0	11.8	33.5	1970	66.3	72.1
Italy	1973	7.6	16.0	9.9	25.7	1964–67	67.9	73.4
Japan	1973	10.4	19.4	6.5	11.7	1972	70.5	75.9
Netherlands	1973	8.0	14.5	8.2	11.6	1972	70.8	76.8
New Zealand	1973	8.9	20.5	8.5	16.2	1960–62	68.4	73.8
Poland	1972	9.3	17.4	8.0	28.5	1970–72	66.8	73.8
Romania	1972	7.6	18.8	9.2	40.0	1970–72	66.3	70.9
Spain	1973	7.7	19.2	8.5	15.1	1960	67.3	71.9
Sri Lanka	1972	6.9	29.5	7.7	45.1	1967	64 8	66.9
Union of Soviet Socialist Republics	1973	10.1	17.7	8.7	26.3	1970–71	65.0	74.0
United Kingdom	1972	8.6	15.0	12.1	17.5	1969–71	68.8	75.1
United States of America	1973	10.9	15.0	9.4	17.6	1972	67.4	75.2
Yugoslavia	1973	8.8	18.0	8.7	43.3	1970–71	65.3	70.1

(*a*) Source for statistics other than Australia.

CHAPTER 9

HOUSING AND BUILDING

Pages 207–14 of this chapter give details of the *characteristics of dwellings obtained from censuses*, pages 214–27 contain a *summary of building activities*, pages 228–39 outline *government activities in the field of housing*, and pages 239–45 relate to *financial arrangements associated with the erection or purchase of homes.*

Further information on dwellings obtained from censuses is available in the detailed tables of the publications issued for each individual census. A list of the 1971 Census publications is shown in *Publications of the Australian Bureau of Statistics* (1.8).

More detailed information on building activity is contained in the annual bulletin *Building and Construction* (3.1) and the *Quarterly Bulletin of Building Statistics* (3.6), and current information is obtainable also in the *Monthly Review of Business Statistics* (1.4), the *Digest of Current Economic Statistics* (1.5), and the mimeographed statements *Building Statistics; Number of Dwellings* (quarterly) (3.5), *Building Operations, Preliminary* (quarterly) (3.7), and *Building Approvals* (monthly) (3.2). Details for particular States are available from publications issued regularly by the Deputy Commonwealth Statistician in each State. The *Building Industry Quarterly* published by the Department of Environment, Housing and Community Development contains further information on current trends in housing activity.

The annual reports of the Commonwealth and State Government Housing Authorities show further details of government activities in the field of housing.

Census dwellings

At each census of the population, in addition to the questions relating to personal particulars, there have been a number of questions relating to dwellings. A 'dwelling' is defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building, and includes, *in addition to houses and self-contained flats*, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. This section contains particulars of such information on dwellings as is available from the 1971 Census, together with information from earlier censuses. In conformity with the 1967 repeal of section 127 of the Constitution, 1971 Census statistics include Aborigines. In order to provide comparability between the 1971 and 1966 censuses, tables showing 1966 data have been amended to include Aborigines or their dwellings (except where noted to the contrary) and therefore differ from the 1966 tables previously published.

Number of dwellings

The following table shows the number of occupied and unoccupied dwellings in Australia at each census from 1911 to 1971. Occupied dwellings are classified into 'private' and 'non-private' dwellings (*see* page 208 for definitions of 'private' and 'non-private' dwellings). Unoccupied dwellings include dwellings whose occupants are temporarily absent, holiday homes, and other temporarily vacant dwellings (*see* page 213 for full explanation of the term 'unoccupied').

DWELLINGS(*a*): AUSTRALIA, CENSUSES, 1911 TO 1971

	Occupied			
Census	*Private*	*Non-private*	*Total*	*Unoccupied*
1911 . . .	894,389	29,070	923,459	33,473
1921 . . .	1,107,010	46,275	1,153,285	51,163
1933 . . .	1,509,671	37,705	1,547,376	68,772
1947 . . .	1,873,623	34,272	1,907,895	47,041
1954 . . .	2,343,421	36,932	2,380,353	112,594
1961 . . .	2,781,945	35,325	2,817,270	194,114
1966 . . .	3,155,340	33,917	3,189,257	263,873
1971 . . .	3,670,553	24,006	3,694,559	339,057

(*a*) Excludes dwellings occupied solely by Aborigines before 1966.

The following table shows the number of occupied and unoccupied dwellings in the urban and rural areas of Australia at the Census of 30 June 1971. For delimitation of 'urban centres' *see* this Year Book, pages 142–3.

DWELLINGS: URBAN AND RURAL, AUSTRALIA, CENSUS 30 JUNE 1971

	Occupied				*Unoccupied*	
			Total			
Division	*Private*	*Non-private*	*Number*	*Percentage of total*	*Number*	*Percentage of total*
Urban—						
Major . . .	2,428,912	10,662	2,439,574	66.03	142,731	42.10
Other . . .	755,196	7,734	762,930	20.65	94,183	27.78
Rural	486,445	5,610	492,055	13.32	102,143	30.12
Total . .	**3,670,553**	**24,006**	**3,694,559**	**100.00**	**339,057**	**100.00**

The total numbers of occupied and unoccupied dwellings in each State and Territory at the Censuses of 1966 and 1971 were as follows.

DWELLINGS: CENSUSES, 1966 AND 1971

	Census 30 June 1966		*Census 30 June 1971*	
State or Territory	*Occupied*	*Unoccupied*	*Occupied*	*Unoccupied*
New South Wales	1,190,010	101,546	1,364,542	124,522
Victoria	889,053	64,757	1,015,485	88,521
Queensland	450,309	41,818	517,245	51,077
South Australia	302,626	25,110	344,112	30,553
Western Australia	225,701	17,965	286,845	28,274
Tasmania	99,366	10,800	110,420	13,307
Northern Territory . . .	8,637	380	17,792	929
Australian Capital Territory .	23,555	1,497	38,118	1,874
Australia	**3,189,257**	**263,873**	**3,694,559**	**339,057**

Class of dwelling (1966 and 1971)

The first of the following tables shows the numbers of the various classes of occupied dwellings in the major urban, other urban, and rural areas of Australia at the Census of 30 June 1971 and totals for the Censuses of 1966 and 1971. The second table shows numbers of the various classes of dwelling for each State and Territory at the 1971 Census.

Private dwellings were classified into the following categories for the 1971 Census:

private house—includes separate, semi-detached, attached and terrace or row houses.

villa unit—also includes dwellings variously described as town house, cottage unit, villa development, cottage flats.

self-contained flat—part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities. Includes home units.

other private dwellings—comprises non-self contained parts or rooms of houses, flats or other premises. Also includes sheds, tents, garages, caravans and houseboats occupied on a permanent or semi-permanent basis.

Non-private dwellings includes hotels; motels; boarding houses and hostels; educational, religious and charitable institutions; hospitals; defence and penal establishments; caravan parks; staff barracks and quarters, etc.

Occupied dwellings, by class

NUMBERS AND PERCENTAGE DISTRIBUTION, URBAN AND RURAL(*a*), AUSTRALIA CENSUSES, 1966 AND 1971

	Census 30 June 1966		*Census 30 June 1971*					
Class of dwelling	*Total*	*Proportion of total occupied dwellings*	*Major urban*	*Other urban*	*Rural*	*Total*	*Proportion of total occupied dwellings*	*Inter-censal increase or decrease*
Occupied dwellings—								
Private dwellings—								
Private house	2,683,310	84.1	1,949,209	674,203	456,829	3,080,241	83.3	396,931
Villa unit	(*b*)	(*b*)	34,131	3,685	1,532	39,348	1.1	n.a.
Self-contained flat	345,645	10.8	389,203	58,759	5,121	453,083	12.3	107,438
Other private dwellings	126,385	4.0	56,369	18,549	22,963	97,881	2.6	−28,504
Total private dwellings	*3,155,340*	*98.9*	*2,428,912*	*755,196*	*486,445*	*3,670,553*	*99.3*	*515,213*
Non-private dwellings(*c*)	33,917	1.1	10,662	7,734	5,610	24,006	0.7	−9,911
Total occupied dwellings	3,189,257	100.0	2,439,574	762,930	492,055	3,694,559	100.0	505,302

(*a*) Census, 30 June 1971 only. (*b*) Villa units were not separately identified at the 1966 Census. (*c*) Details of the number of each of the types of non-private dwellings are available on request.

Minus sign (—) denotes decrease.

OCCUPIED DWELLINGS, BY CLASS, CENSUS 30 JUNE 1971

Class of dwelling	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Occupied dwellings—									
Private dwellings—									
Private house	1,086,360	854,636	442,985	306,628	247,769	98,749	10,668	32,446	3,080,241
Villa unit	5,995	15,300	1,676	13,430	1,925	647	125	250	39,348
Self-contained flat	225,549	120,857	49,313	16,569	25,473	8,417	2,202	4,703	453,083
Other private dwellings	38,629	19,393	18,626	5,437	9,192	1,784	4,287	533	97,881
Total private dwellings	*1,356,533*	*1,010,186*	*512,600*	*342,064*	*284,359*	*109,597*	*17,282*	*37,932*	*3,670,553*
Non-private dwellings(*a*)	8,009	5,299	4,645	2,048	2,486	823	510	186	24,006
Total occupied dwellings	**1,364,542**	**1,015,485**	**517,245**	**344,112**	**286,845**	**110,420**	**17,792**	**38,118**	**3,694,559**

(*a*) Details of the number of each of the types of non-private dwellings are available on request.

Population according to class of dwelling, etc. (1966 and 1971)

INMATES BY CLASS OF DWELLING: NUMBERS AND PERCENTAGE DISTRIBUTION URBAN AND RURAL(*a*), AUSTRALIA, CENSUSES, 1966 AND 1971

	Census 30 June 1966		*Census 30 June 1971*					
	Total	*Proportion of total population*	*Major urban*	*Other urban*	*Rural*	*Total*	*Proportion of total population*	*Inter-censal increase or decrease*
Persons enumerated in—								
Private dwellings—								
Private house	9,836,988	84.8	6,877,496	2,312,620	1,651,101	10,841,217	85.0	1,004,229
Villa unit	(*b*)	(*b*)	68,118	8,431	5,690	82,239	0.6	n.a.
Self-contained flat	834,179	7.2	874,268	137,780	13,173	1,025,221	8.0	191,042
Other private dwellings	284,084	2.4	97,339	44,655	64,715	206,709	1.6	−77,375
Total private dwellings	*10,955,251*	*94.4*	*7,917,221*	*2,503,486*	*1,734,679*	*12,155,386*	*95.3*	*1,200,135*
Non-private dwellings	594,081	5.1	308,759	181,140	86,130	576,029	4.5	−18,052
Total	**11,549,332**	**99.5**	**8,225,980**	**2,684,626**	**1,820,809**	**12,731,415**	**99.8**	**1,182,083**
Persons not enumerated in dwellings—								
Campers out(*c*)	30,478	0.3	795	2,050	4,155	7,000	0.1	−23,478
Migratory(*d*)	19,688	0.2	..	..	..	17,223	0.1	−2,465
Total population	11,599,498	100.0	8,226,775	2,686,676	1,824,964	12,755,638	100.0	1,156,140

(*a*) Census, 30 June 1971 only. (*b*) Villa units were not separately identified at the 1966 Census. (*c*) Comprises persons living temporarily (e.g. on holidays) in tents, caravans or house-boats, or who were 'camped out' on Census night. (*d*) Comprises persons who on Census night were travelling on board ships in Australian waters, or ships which had left an Australian port prior to Census night with a next port of call in Australia. Also includes persons enumerated on long-distance trains, motor coaches or aircraft.

Minus sign (—) denotes decrease.

Occupied private dwellings

The tables on pages 210–13 show **occupied private houses and self-contained flats** classified according to various characteristics and facilities.

Nature of occupancy (1966 and 1971)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS BY NATURE OF OCCUPANCY: AUSTRALIA, CENSUSES, 1966 AND 1971

	Private houses				*Self-contained flats*			
	Census 30 June 1966		*Census 30 June 1971*		*Census 30 June 1966*		*Census 30 June 1971*	
Nature of occupancy	*Total*	*Percentage of private houses*	*Total*	*Percentage of private houses*	*Total*	*Percentage of flats*	*Total*	*Percentage of flats*
Owner or purchaser by instalments	2,124,004	79.2	2,334,391	75.8	72,713	21.0	91,454	20.2
Tenant of government	133,104	5.0	164,284	5.3	27,348	7.9	34,111	7.5
Tenant of employer	*a* 361,671	(*a*)13.5	85,202	2.8	*a* 237,488	(*a*)68.7	7,538	1.7
Other tenant			343,303	11.1			296,607	65.5
Other methods of occupancy	48,446	1.8	99,027	3.2	5,645	1.6	9,651	2.1
Not stated	16,085	0.6	54,034	1.8	2,451	0.7	13,722	3.0
Total	**2,683,310**	**100.0**	**3,080,241**	**100.0**	**345,645**	**100.0**	**453,083**	**100.0**

(*a*) 'Tenant of employer' and 'other Tenant' were not separately identified at the 1966 Census.

Material of outer walls (1966 and 1971)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS, BY MATERIAL OF OUTER WALLS: AUSTRALIA, CENSUSES, 1966 AND 1971

	Census 30 June 1966				*Census 30 June 1971*			
Material of outer walls	*Private house*	*Percentage of total*	*Self-contained flat*	*Percentage of total*	*Private house*	*Percentage of total*	*Self-contained flat*	*Percentage of total*
Brick	674,335	25.1	224,962	65.1	882,847	28.7	325,952	71.9
Brick veneer	262,160	9.8	16,250	4.7	391,545	12.7	24,212	5.3
Stone	68,919	2.6	6,515	1.9	69,726	2.3	6,362	1.4
Concrete	68,187	2.5	17,678	5.1	68,922	2.2	25,405	5.6
Timber	1,076,967	40.1	50,276	14.5	1,121,288	36.4	45,106	10.0
Metal	28,770	1.1	1,171	0.3	39,042	1.3	1,206	0.3
Fibro-cement	495,718	18.5	28,577	8.3	499,019	16.2	24,410	5.4
Other	8,254	0.3	216	0.1	7,852	0.3	430	0.1
Total	**2,683,310**	**100.0**	**345,645**	**100.0**	**3,080,241**	**100.0**	**453,083**	**100.0**

Number of rooms

OCCUPIED PRIVATE DWELLINGS BY NUMBER OF ROOMS AND CLASS OF DWELLING AUSTRALIA, CENSUS, 30 JUNE 1971

Number of rooms per dwelling(a)	*Class of dwelling*				
	Private house	*Villa unit*	*Self-contained flat*	*Other*	*Total private dwellings*
1	6,087	1,269	19,100	43,771	70,227
2	23,957	4,791	79,502	27,173	135,423
3	95,603	10,437	134,006	13,586	253,632
4	460,652	16,665	152,403	5,189	634,909
5	1,333,989	4,248	46,715	2,735	1,387,687
6	726,508	1,214	13,240	1,816	742,778
7	276,212	326	3,978	968	281,484
8 and over	157,233	398	4,139	2,643	164,413
Total private dwellings	**3,080,241**	**39,348**	**453,083**	**97,881**	**3,670,553**
Average number of rooms per dwelling	5.3	3.6	3.5	2.2	5.0

(*a*) Bathrooms, toilets, pantries, laundries, storerooms, halls and rooms used only for business purposes are excluded, but permanently enclosed sleep-outs are included. A combined purpose room such as a living-dining or kitchen-dining room is counted as only one room.

OCCUPIED PRIVATE DWELLINGS BY NUMBER OF BEDROOMS AND CLASS OF DWELLING AUSTRALIA, CENSUS 30 JUNE 1971

Number of bedrooms per dwelling	*Class of dwelling*				
	Private house	*Villa unit*	*Self-contained flat*	*Other*	*Total private dwellings*
No bedroom	9,365	2,162	26,000	39,716	77,243
1	83,586	10,106	152,125	29,371	275,188
2	718,696	21,761	217,283	9,544	967,284
3	1,777,575	4,108	41,526	3,023	1,826,232
4	392,092	477	5,113	1,155	398,837
5 and over	77,400	302	2,507	2,304	82,513
Not stated	21,527	432	8,529	12,768	43,256
Total private dwellings	**3,080,241**	**39,348**	**453,083**	**97,881**	**3,670,553**
Average number of bedrooms per dwelling	2.9	1.8	1.6	0.8	2.6

Occupied self-contained flats

NUMBER OF OCCUPIED SELF-CONTAINED FLATS AND NUMBER OF INMATES BY NUMBER OF FLATS IN BLOCK: CENSUS 30 JUNE 1971

	Number of flats in block						
State or Territory	*1(a)*	*2*	*3–8*	*9–16*	*17–32*	*33+*	*Total*
New South Wales—							
Number of self-contained flats	19,919	26,794	80,749	55,755	26,399	15,933	225,549
Number of inmates	51,781	69,374	191,739	123,699	53,615	30,140	520,348
Victoria—							
Number of self-contained flats	13,524	12,028	42,117	32,671	12,159	8,358	120,857
Number of inmates	34,243	28,837	97,435	66,780	22,787	20,979	271,061
Queensland—							
Number of self-contained flats	3,775	10,546	29,494	3,402	1,112	984	49,313
Number of inmates	9,388	27,477	65,355	6,576	2,142	1,819	112,757
South Australia—							
Number of self-contained flats	3,234	2,703	6,939	2,035	869	789	16,569
Number of inmates	6,866	6,109	14,385	3,944	1,592	1,366	34,262
Western Australia—							
Number of self-contained flats	1,541	1,208	5,780	5,390	4,956	6,598	25,473
Number of inmates	3,423	2,676	11,952	11,940	10,961	13,257	54,209
Tasmania—							
Number of self-contained flats	1,609	2,431	3,207	714	223	233	8,417
Number of inmates	3,692	5,872	6,523	1,171	464	439	18,161
Northern Territory—							
Number of self-contained flats	244	222	985	241	379	131	2,202
Number of inmates	592	592	2,379	549	893	305	5,310
Australian Capital Territory—							
Number of self-contained flats	589	534	1,067	1,008	670	835	4,703
Number of inmates	1,196	1,267	2,222	2,035	1,294	1,099	9,113
Australia—							
Number of self-contained flats	**44,435**	**56,466**	**170,338**	**101,216**	**46,767**	**33,861**	**453,083**
Number of inmates	**111,181**	**142,204**	**391,990**	**216,694**	**93,748**	**69,404**	**1,025,221**

(*a*) Represents flats that are not part of a multi-flat unit.

Facilities (1966 and 1971)

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS BY GAS ELECTRICITY AND TELEVISION FACILITIES: AUSTRALIA CENSUSES, 1966 AND 1971

	Census 30 June 1966		*Census 30 June 1971*	
Facilities	*Private house*	*Self-contained flat*	*Private house*	*Self-contained flat*
With gas only	5,193	486	3,078	196
With electricity only	1,506,229	128,094	1,833,684	226,114
With gas and electricity	1,139,949	214,897	1,215,709	219,164
Neither gas nor electricity	24,109	272	9,440	207
Not stated	7,830	1,896	18,330	7,402
Total	**2,683,310**	**345,645**	**3,080,241**	**453,083**
With television	2,154,520	235,106	2,488,764	305,046
Without television	528,790	110,539	236,386	70,071
Not stated			355,091	77,966
Total	**2,683,310**	**345,645**	**3,080,241**	**453,083**

NOTE. Dwellings for which electricity was not stated but which had television have been classified as having electricity and therefore included as such in this table.

OCCUPIED PRIVATE DWELLINGS BY BATHROOM AND KITCHEN FACILITIES AND CLASS OF DWELLING: AUSTRALIA, CENSUS 30 JUNE 1971

	Class of dwelling					
Facilities	*Private house*	*Villa unit*	*Self-contained flat*	*Other*	*Total*	*Proportion of total*
Bathroom only . . .	7,847	325	1,235	7,960	17,367	0.5
Kitchen only . . .	14,327	344	1,326	10,447	26,444	0.7
Bathroom and kitchen . .	3,036,856	38,200	443,530	61,543	3,580,129	97.5
Neither bathroom nor kitchen	3,930	130	. .	8,925	12,985	0.4
Not stated	17,281	349	6,992	9,006	33,628	0.9
Total	**3,080,241**	**39,348**	**453,083**	**97,881**	**3,670,553**	**100.0**

OCCUPIED PRIVATE HOUSES AND SELF-CONTAINED FLATS BY NUMBER OF MOTOR VEHICLES: URBAN AND RURAL(*a*), AUSTRALIA, CENSUSES, 1966 AND 1971

	Census 30 June 1966		*Census 30 June 1971*							
			Major urban		*Other urban*		*Rural*		*Total*	
Number of motor vehicles	*Houses*	*Flats*	*Houses*	*Flats*	*Houses*	*Flats*	*Houses*	*Flats*	*Houses*	*Flats*
No vehicles .	557,392	131,051	367,305	139,441	110,934	15,386	41,940	976	520,179	155,803
1 . . .	1,400,206	164,948	980,979	194,127	365,315	32,923	198,269	2,815	1,544,563	229,865
2 . . .	517,566	27,466	461,605	35,472	151,463	6,832	131,455	845	744,523	43,149
3 . . .	114,800	4,083	86,338	4,338	27,766	1,033	50,652	197	164,756	5,568
4 or more .	38,838	1,261	20,949	2,071	8,430	541	28,100	103	57,479	2,715
Not stated .	54,508	16,836	32,033	13,754	10,295	2,044	6,413	185	48,741	15,983
Total .	**2,683,310**	**345,645**	**1,949,209**	**389,203**	**674,203**	**58,759**	**456,829**	**5,121**	**3,080,241**	**453,083**

(*a*) Census, 30 June 1971 only.

OCCUPIED PRIVATE DWELLINGS BY METHOD OF SEWAGE DISPOSAL AND CLASS OF DWELLING: AUSTRALIA, CENSUS 30 JUNE 1971

	Class of dwelling					
Method of sewage disposal	*Private house*	*Villa unit*	*Self-contained flat*	*Other*	*Total*	*Proportion of total*
Mains sewer . . .	1,955,150	34,196	402,237	53,250	2,444,833	66.5
Separate	786,471	3,947	35,922	12,340	838,680	22.8
Sanitary pan . . .	227,984	582	5,342	7,370	241,278	6.6
Other	90,300	238	827	14,272	105,637	2.9
Not stated	20,336	385	8,755	10,649	40,125	1.1
Total	**3,080,241**	**39,348**	**453,083**	**97,881**	**3,670,553**	**100.0**

Unoccupied dwellings (1971)

An unoccupied dwelling is defined as a structure built specifically for private living purposes and which is habitable, though unoccupied at the time of the Census. The total number of unoccupied dwellings shown for any area does not represent the number of vacant dwellings available for sale or renting.

UNOCCUPIED PRIVATE DWELLINGS BY REASON UNOCCUPIED: NUMBERS AND PERCENTAGE DISTRIBUTION URBAN AND RURAL, AUSTRALIA CENSUS 30 JUNE 1971

	Major urban		*Other urban*		*Rural*		*Total*	
Reason unoccupied	*Number*	*Percentage of total*	*Number*	*Percentage of total*	*Number*	*Percentage of total*	*Number*	*Percentage of total*
For sale . . .	16,480	4.9	6,088	1.8	3,416	1.0	25,984	7.7
To let . . .	23,027	6.8	12,154	3.6	6,260	1.8	41,441	12.2
Newly built . .	14,417	4.3	3,820	1.1	1,988	0.6	20,225	6.0
Vacant for repair .	7,049	2.1	2,925	0.9	3,141	0.9	13,115	3.9
Holiday home . .	13,822	4.1	37,403	11.0	41,257	12.2	92,482	27.3
Condemned . .	4,555	1.3	2,268	0.7	5,292	1.6	12,115	3.6
Temporarily vacant .	50,370	14.9	24,084	7.1	18,389	5.4	92,843	27.4
Other reasons . .	8,427	2.5	3,675	1.1	19,474	5.7	31,576	9.3
Not stated . .	4,584	1.4	1,766	0.5	2,926	0.9	9,276	2.7
Total . .	**142,731**	**42.1**	**94,183**	**27.8**	**102,143**	**30.1**	**339,057**	**100.0**

UNOCCUPIED PRIVATE DWELLINGS BY REASON UNOCCUPIED AND CLASS OF DWELLING: AUSTRALIA, CENSUS 30 JUNE 1971

	Class of dwelling					
Reason unoccupied	*Private house*	*Villa unit*	*Self-contained flat*	*Other*	*Total*	*Percentage of total*
For sale . . .	20,609	1,302	3,952	121	25,984	7.7
To let . . .	18,078	552	19,855	2,956	41,441	12.2
Newly built . .	13,354	1,129	5,570	172	20,225	6.0
Vacant for repair .	11,419	48	1,453	195	13,115	3.9
Holiday home . .	83,654	703	6,537	1,588	92,482	27.3
Condemned . .	11,485	12	508	110	12,115	3.6
Temporarily vacant .	71,909	1,963	16,176	2,795	92,843	27.4
Other reasons . .	28,956	203	1,839	578	31,576	9.3
Not stated . .	7,039	86	1,737	414	9,276	2.7
Total . .	**266,503**	**5,998**	**57,627**	**8,929**	**339,057**	**100.0**

Building

Building activity is a significant indicator of the level of economic activity. In addition, the level of building activity and the types of buildings being constructed affect the Australian physical and social environment. Building approvals statistics give an indication of the potential future level of investment of private individuals, companies and government agencies in approved building construction. As such they provide information about potential future building activity. Building operations statistics show the level of actual building construction activity in terms of the level of commencements and completions, building jobs under construction and the value of work done and yet to be done on building jobs.

Scope and coverage

The statistics relate to building structures, and exclude railways, roads, bridges, earthworks, and other non-building construction. Renovations, repairs and maintenance are excluded.

Statistics of building approvals are compiled from (*a*) Permits granted by local government authorities covering those areas subject to building control by those authorities, (*b*) Contracts let or day labour work approved by Commonwealth, State, semi-government, and local government authorities.

Statistics of building operations are compiled from returns obtained from (*a*) Contract (including speculative) builders and those engaged in alterations and additions, (*b*) Owner-builders, and (*c*) Government or semi-government authorities.

Details for owner-builders cover only those areas subject to building control by local government authorities. Details obtained from government authorities, and contract and speculative builders refer to all areas.

The collection covers all new dwellings, new other building jobs valued at $10,000 and over, and alterations and additions (both to dwellings and other buildings) valued at $10,000 and over. From 1966–67 to 1972–73 alterations and additions of $10,000 and over were included with new dwellings and new other building. From 1973–74 alterations and additions (of $10,000 and over) to new dwellings are shown separately but for other building, new work and alterations and additions continue to be shown combined.

Definitions

A *dwelling* is classified as either a 'house' or an 'other dwelling'. (*a*) A 'house' is defined as a building which has been designed or adapted so that its prime purpose is to be a single self-contained dwelling unit (i.e. includes bathing and cooking facilities), which is completely detached from other buildings, and occupies (except in such cases as dwellings built for employees or families of the owner or lessee of the land) a separate titled block of land. (*b*) An 'other dwelling' is defined as a self-contained dwelling unit other than a house as defined in (*a*) above. These include flats, home units, semi-detached dwellings, villa units, town houses, etc.

Non-self-contained dwelling units (e.g. those which might be located in motels, hostels, and institutions) are not included as dwellings and the value of this building is included in the appropriate category of other building. Temporary or makeshift dwellings are excluded from building statistics.

Commenced. A building is regarded as having been commenced when expenditure on building work is first reported.

Completed. A building is regarded as having been completed when it is reported as completed or in the case of owner-builders is reported as completed or substantially completed and occupied.

Under Construction. A building is regarded as being under construction at the end of a period if it has been commenced but has not been completed and work on it has not been abandoned.

Contract built houses. Those erected under contract, or in anticipation of sale or rental.

Owner-built houses. Those erected by an owner (other than a recognised builder) or under his direction without the services of a contractor responsible for the whole job.

Value of Building approved, commenced, completed, or under construction represents the estimated value of the whole job when completed, *excluding* the value of the land on which the job is carried out.

Value of Building Work Done represents the estimated value of the building work actually carried out during the period.

Value of Building Work Yet to be Done is the estimated value of work remaining to be done on building jobs under construction at the end of the period.

Building classification

Private or government. A building job is classified as 'private' or 'government' according to ownership at date of commencement.

Building is classified according to the function it is intended to serve. A building which is ancillary to other buildings or forms part of a group of related buildings is classified according to the function of the group as a whole.

Examples of the types of individual building jobs included under each main functional heading are as follows:

Hotels, etc. Includes motels, hostels, boarding houses and guest houses.

Shops. Includes cafes, restaurants, retail markets and showrooms. Shops classified as government include government owned shop buildings for leasing.

Factories. Includes abattoirs, brickworks, power houses, printing offices and government workshops.

Offices. Includes banks, post offices and council chambers.

Other business premises. Includes service stations, bus depots. wholesale stores, telephone exchanges, television stations and studios, and warehouses.

Education. Includes schools, colleges, kindergartens, reference libraries and universities.

Religion. Includes churches, church halls, convents. seminaries and theological colleges.

Health. Includes ambulance stations, baby health clinics, convalescent homes, hospitals, nurses' quarters and sanatoria.

Entertainment and recreation. Includes clubs, gymnasiums, public halls, squash courts and theatres.

Miscellaneous. Includes homes for aged, law courts, defence buildings, museums, orphanages, police stations and reformatories.

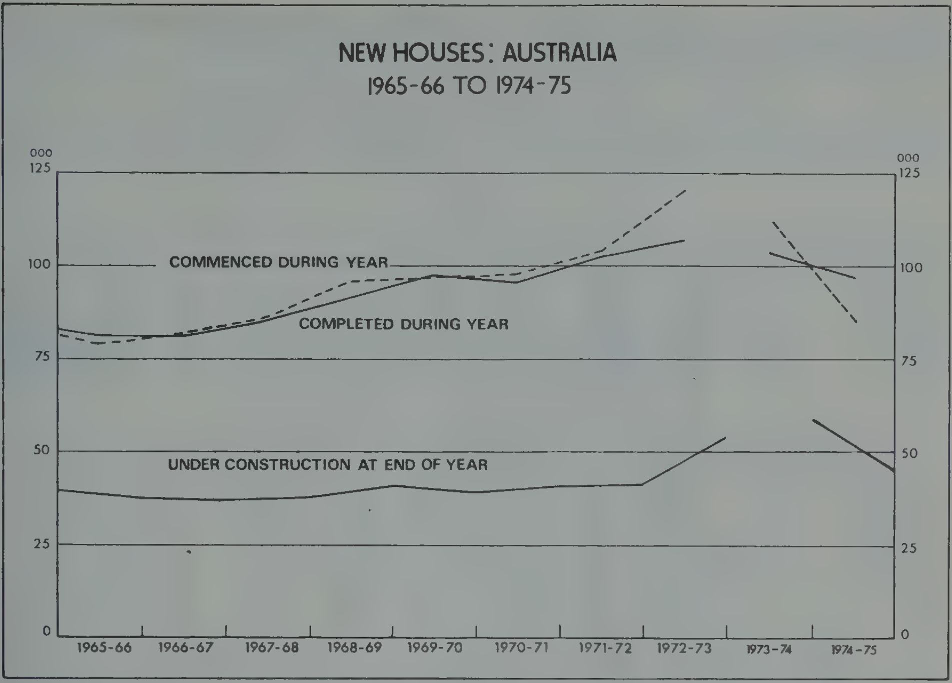
Persons working. Figures relate to persons working on the jobs of contractors who undertake the erection of new buildings and of government authorities which erect new buildings on their own account. They include persons working on alterations, additions, repairs and maintenance when these jobs are undertaken by such contractors and authorities. Contractors are asked to give details of all persons working on their jobs *on a specified day*, including working principals, men working as or for sub-contractors and men temporarily laid off on account of weather. Because of the intermittent employment of various types of sub-contractors on any particular job, it is sometimes difficult for contractors and authorities to provide precise particulars of the number of sub-contractors and the number of employees of sub-contractors working on their jobs on the specified day. This factor may cause some estimation by persons completing returns and some degree of understatement in figures shown in tables. On the other hand, because of frequent movement between jobs of some types of tradesmen (such as electricians) who may work on several jobs on the one day, a small element of duplication may occur. The figures *exclude* persons working on owner-built houses, and employees of builders who undertake only alterations, additions, repairs and maintenance.

New houses approved, commenced, completed and under construction

The next table provides a summary for 1974–75 of the number of new houses approved, commenced, completed and under construction in each State and Territory. For a graph showing the number of new houses commenced, completed and under construction over a ten year period *see* plate 32, page 217.

NUMBER OF NEW HOUSES, 1974-75(*a*)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Approved . . .	23,267	23,506	14,014	8,760	10,391	2,627	1,389	3,602	87,556
Commenced . .	23,598	24,218	13,796	8,320	9,706	2,497	910	3,431	86,476
Completed . . .	26,261	26,902	16,392	9,071	10,994	2,650	630	4,072	96,972
Under construction at end of period . .	12,162	15,778	5,142	4,455	4,016	1,798	490	2,285	46,126



NOTE. BREAK IN SERIES FROM 1973-74, *SEE* PAGE 215

PLATE 32

The following table shows the number of *new houses approved* in each State or Territory, according to *private and government ownership*.

NUMBER OF NEW HOUSES APPROVED, BY OWNERSHIP

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				PRIVATE					
1970–71(*a*)	27,066	23,213	14,332	6,594	9,255	1,969	234	2,673	85,336
1971–72(*a*)	27,535	26,908	18,213	7,245	10,833	1,996	298	2,748	95,776
1972–73(*a*)	32,273	34,350	22,797	9,559	14,572	2,457	334	3,416	119,758
1973–74	30,883	29,974	20,185	9,681	12,057	2,629	402	2,707	108,518
1974–75	18,437	21,018	11,970	7,259	9,457	1,954	212	2,633	72,940
				GOVERNMENT					
1970–71(*a*)	4,109	1,466	2,049	2,151	2,570	612	889	972	14,818
1971–72(*a*)	2,393	1,510	1,515	1,105	1,972	488	634	877	10,494
1972–73(*a*)	3,054	1,983	1,841	1,395	2,424	601	586	1,233	13,117
1973–74	2,856	1,656	1,985	1,231	670	653	1,146	1,154	11,351
1974–75	4,830	2,488	2,044	1,501	934	673	1,177	969	14,616
				TOTAL					
1970–71(*a*)	31,175	24,679	16,381	8,745	11,825	2,581	1,123	3,645	100,154
1971–72(*a*)	29,928	28,418	19,728	8,350	12,805	2,484	932	3,625	106,270
1972–73(*a*)	35,327	36,333	24,638	10,954	16,996	3,058	920	4,649	132,875
1973–74	33,739	31,630	22,170	10,912	12,727	3,282	1,548	3,861	119,869
1974–75	23,267	23,506	14,014	8,760	10,391	2,627	1,389	3,602	87.556

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215).

The number of *new houses completed* represents the gross increase in the stock of houses. The number of *new houses completed* according to *private and government ownership*, is shown in the following table.

NUMBER OF NEW HOUSES COMPLETED, BY OWNERSHIP

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PRIVATE									
1970–71(*a*)	24,931	23,110	12,879	6,353	9,648	1,636	244	2,425	81,226
1971–72(*a*)	26,185	24,052	15,739	6,956	11,167	1,795	627	2,757	89,278
1972–73(*a*)	26,213	27,300	18,968	7,530	11,723	1,842	292	2,883	96,751
1973–74	27,021	26,265	19,018	8,127	11,238	2,233	343	2,791	97,036
1974–75	23,349	24,205	14,363	7,883	10,148	2,102	202	2,850	85,102
GOVERNMENT									
1970–71(*a*)	4,120	2,069	1,806	1,955	2,273	627	611	744	14,205
1971–72(*a*)	3,846	1,575	1,737	2,105	2,120	466	864	962	13,675
1972–73(*a*)	2,352	960	1,728	1,447	2,057	542	681	800	10,567
1973–74	1,700	800	1,437	825	1,279	586	603	642	7,872
1974–75	2,912	2,697	2,029	1,188	846	548	428	1,222	11,870
TOTAL									
1970–71(*a*)	29,051	25,179	14,685	8,308	11,921	2,263	855	3,169	95,431
1971–72(*a*)	30,031	25,627	17,476	9,061	13,287	2,261	1,491	3,719	102,953
1972–73(*a*)	28,565	28,260	20,696	8,977	13,780	2,384	973	3,683	107,318
1973–74	28,721	27,065	20,455	8,952	12,517	2,819	946	3,433	104,908
1974–75	26,261	26,902	16,392	9,071	10,994	2,650	630	4,072	96,972

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215).

New houses completed by material of outer walls

The use of certain materials for outer walls is dictated by such factors as cost, durability, appearance and climatic conditions. Changes in the materials used over time indicate changes in the charateristics of the housing stock.

The following tables show the number of *new houses completed* in each State and Territory during 1974–75 and in Australia during the years 1970–71 to 1974–75, classified according to the *material of their outer walls.*

NUMBER OF NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS, 1974–75

Material of outer wall	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.(a)*	*A.C.T.*	*Aust.(a)*
Brick, concrete and stone	1,783	1,094	1,542	4,138	8,189	167	185	113	17,211
Brick veneer	18,379	23,098	8,651	3,611	1,457	2,160	59	3,957	61,372
Wood (weatherboard, etc.)	1,147	676	2,454	84	23	116	1	1	4,502
Asbestos-cement	4,415	1,935	3,477	1,224	1,284	182	159	..	12,676
Other	537	99	268	14	41	25	50	1	1,035
Total	**26,261**	**26,902**	**16,392**	**9,071**	**10,994**	**2,650**	**454**	**4,072**	**96,796**

(*a*) Excludes new houses completed in Darwin in December quarter 1974 for which details are not available.

NUMBER OF NEW HOUSES COMPLETED, BY MATERIAL OF OUTER WALLS, AUSTRALIA

Material of outer walls	*1970–71(a)*	*1971–72(a)*	*1972–73(a)*	*1973–74*	*1974–75(b)*
Brick, concrete and stone	16,911	19,599	20,312	19,059	17,211
Brick veneer	55,616	60,882	66,109	66,284	61,372
Wood (weatherboard, etc).	8,237	8,204	7,531	6,077	4,502
Asbestos-cement	13,763	13,085	12,542	12,462	12,676
Other	904	1,183	824	1,026	1,035
Total	**95,431**	**102,953**	**107,318**	**104,908**	**96,796**

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215). (*b*) Excludes new houses completed in Darwin in December quarter 1974 for which details are not available.

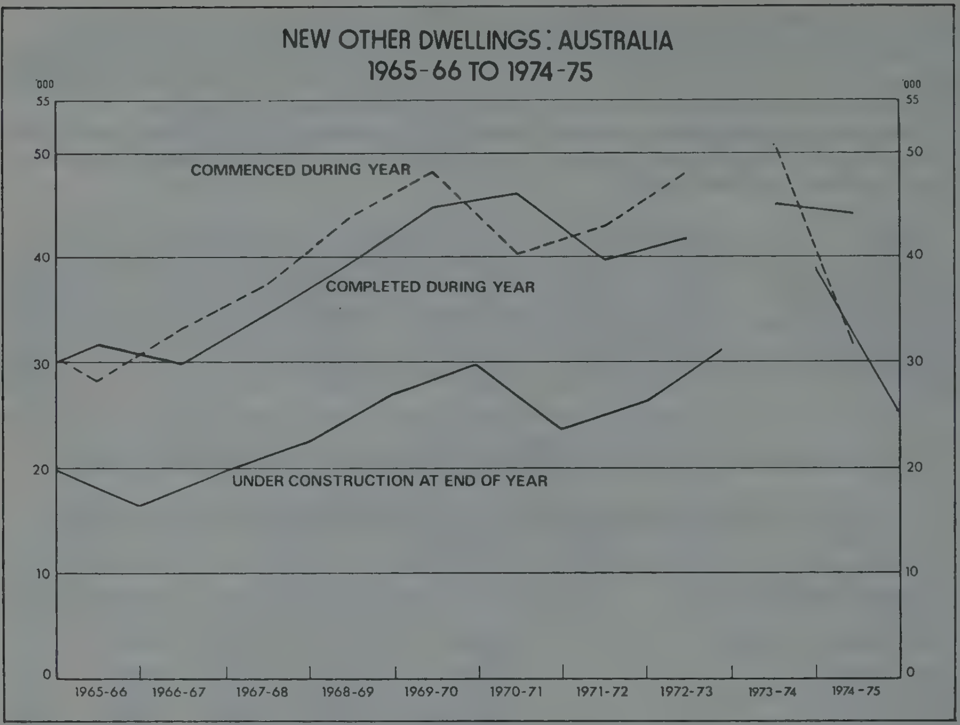
New other dwellings approved, commenced, completed and under construction

The level of other dwelling construction is highly variable and does not follow the regular pattern experienced in house construction. This can mainly be explained by the large extent of speculative building of private flats and also the generally larger size of such projects. Although construction of government owned other dwellings is substantial, the proportion of government owned other dwellings to total other dwellings constructed is smaller than that of government owned houses to total houses.

The following table shows the number of new other dwellings approved, commenced, completed and under construction for the year 1974–75. For a graph showing the number of new other dwellings commenced, completed and under construction over a ten year period *see* plate 33, page 220.

NUMBER OF NEW OTHER DWELLINGS, 1974–75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Approved	14,858	7,105	4,095	3,920	2,411	695	132	551	33,767
Commenced	13,240	7,438	3,593	3,633	2,316	730	272	411	31,633
Completed	18,648	10,440	5,988	3,802	3,300	812	274	859	44,123
Under construction at end of year	10,039	7,116	2,437	3,187	1,165	571	306	604	25,425



NOTE. BREAK IN SERIES FROM 1973-74, *SEE* PAGE 215

PLATE 33

The following table shows the number of *new other dwellings approved* in each State or Territory according to *private and government ownership.*

NUMBER OF NEW OTHER DWELLINGS APPROVED, BY OWNERSHIP

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PRIVATE									
1970–71(*a*)	16,742	8,612	4,409	4,993	1,281	548	179	246	37,010
1971–72(*a*)	18,660	9,085	5,899	4,579	1,120	642	565	347	40,897
1972–73(*a*)	22,302	12,872	8,827	3,578	890	719	452	542	50,182
1973–74	24,680	12,028	9,334	5,398	3,438	773	282	509	56,442
1974–75	11,588	6,685	4,059	3,127	2,250	572	65	261	28,607
GOVERNMENT									
1970–71(*a*)	1,856	1,059	29	176	612	62	68	..	3,862
1971–72(*a*)	868	1,218	223	96	135	267	74	198	3,079
1972–73(*a*)	1,838	797	484	228	255	49	40	..	3,691
1973–74	1,034	868	177	323	456	118	163	270	3,409
1974–75	3,270	420	36	793	161	123	67	290	5,160
TOTAL									
1970–71(*a*)	18,598	9,671	4,438	5,169	1,893	610	247	246	40,872
1971–72(*a*)	19,528	10,303	6,122	4,675	1,255	909	639	545	43,976
1972–73(*a*)	24,140	13,669	9,311	3,806	1,145	768	492	542	53,873
1973–74	25,714	12,896	9,511	5,721	3,894	891	445	779	59,851
1974–75	14,858	7,105	4,095	3,920	2,411	695	132	551	33,767

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215).

The number of *new other dwellings commenced* in each State and Territory is shown in the following table.

NUMBER OF NEW OTHER DWELLINGS COMMENCED

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71(*a*)	18,912	10,312	3,639	4,282	1,759	747	435	310	40,396
1971–72(*a*)	19,516	10,335	5,324	4,405	1,340	860	634	412	42,826
1972–73(*a*)	21,208	12,548	7,083	4,112	1,236	765	535	461	47,948
1973–74	21,005	12,142	8,132	4,439	3,214	760	429	801	50,922
1974–75	13,240	7,438	3,593	3,633	2,316	730	272	411	31,633

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215).

The following table shows the number of *new other dwellings completed* in each State and Territory, according to *private and government ownership.*

NUMBER OF NEW OTHER DWELLINGS COMPLETED, BY OWNERSHIP

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PRIVATE									
1970–71(*a*)	19,461	11,071	3,159	3,755	3,608	583	267	333	42,237
1972–71(*a*)	16,453	8,821	4,482	4,114	992	598	378	192	36,030
1972–73(*a*)	18,145	8,686	5,538	4,039	770	645	425	352	38,600
1973–74	18,223	9,335	6,540	3,460	2,711	655	392	260	41,576
1974–75	17,547	9,650	5,739	3,303	2,827	627	226	659	40,578
GOVERNMENT									
1970–71(*a*)	885	1,016	..	245	1,405	84	100	..	3,735
1971–72(*a*)	1,536	1,270	13	70	603	169	110	..	3,771
1972–73(*a*)	1,203	1,237	205	178	150	136	23	94	3,226
1973–74	1,177	719	221	495	835	51	46	..	3,544
1974–75	1,101	790	249	499	473	185	48	200	3,545
TOTAL									
1970–71(*a*)	20,346	12,087	3,159	4,000	5,013	667	367	333	45,972
1971–72(*a*)	17,989	10,091	4,495	4,184	1,595	767	488	192	39,801
1972–73(*a*)	19,348	9,923	5,743	4,217	920	781	448	446	41,826
1973–74	19,400	10,054	6,761	3,955	3,546	706	438	260	45,120
1974–75	18,648	10,440	5,988	3,802	3,300	812	274	859	44,123

(*a*) Includes alterations and additions valued at $10,000 or more (*see* page 215).

Value of buildings approved, commenced, completed and under construction

The following table summarises the values of all buildings approved, commenced, completed, under construction, the value of work done, and the value of work yet to be done in each State and Territory.

VALUE OF BUILDING WORK, BY STAGE OF CONSTRUCTION
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
APPROVED									
1970–71	1,028,127	625,908	373,568	209,354	307,680	68,043	51,295	102,266	2,766,241
1971–72	1,111,808	763,836	411,672	238,940	293,340	70,086	53,507	95,716	3,038,904
1972–73	1,287,256	1,087,202	608,823	280,772	389,211	90,422	62,513	146,146	3,952,344
1973–74	1,503,933	1,155,696	744,497	394,852	434,928	100,719	99,832	169,811	4,604,267
1974–75	1,218,274	1,088,734	610,403	369,896	395,904	112,109	71,394	266,594	4,133,310
COMMENCED									
1970–71	1,104,352	672,037	383,190	217,912	317,880	70,189	57,593	115,726	2,938,879
1971–72	1,180,388	733,418	428,469	226,132	297,701	64,319	67,242	98,994	3,096,663
1972–73	1,365,861	1,048,141	584,517	272,299	363,006	90,607	72,827	145,589	3,942,846
1973–74	1,503,398	1,172,975	733,969	359,192	428,953	107,126	101,235	178,989	4,585,840
1974–75	1,313,997	1,080,783	637,028	364,586	402,758	113,180	61,342	189,445	4,163,119
COMPLETED									
1970–71	946,552	667,966	333,785	200,895	365,012	59,684	34,006	83.139	2,691,039
1971–72	1,138,253	677,381	397,748	215,036	331,440	69,717	71,132	90,367	2,991,074
1972–73	1,146,793	809,900	509,288	255,394	324,013	78,104	51,524	115,267	3,290,282
1973–74	1,326,619	910,433	586,694	272,296	351,165	89,030	63,525	131,375	3,731,138
1974–75	1,472,629	1,108,278	663,206	367,403	412,020	99,494	35,201	172,588	4,330,819
UNDER CONSTRUCTION AT END OF YEAR									
1970–71	986,280	520,378	211,182	174,376	209,675	63,465	52,971	116,892	2,335,219
1971–72	1,046,784	598,243	252,176	186,408	184,096	61,636	49,487	135,293	2,514,123
1972–73	1,319,571	860,390	335,012	210,844	225,219	76,522	69,708	172,428	3,269,694
1973–74	1,583,157	1,170,866	501,757	312,045	310,953	97,363	107,816	246,928	4,330,885
1974–75	1,613,272	1,228,308	512,016	342,362	322,879	116,319	113,253	286,827	4,535,236
VALUE OF WORK DONE DURING YEAR									
1970–71	1,028,476	677,474	345,769	209,716	347,022	65,446	47,446	94,284	2,815,633
1971–72	1,179,617	713,369	425,343	229,050	329,811	70,181	73,104	111,958	3,132,433
1972–73	1,277,708	882,786	524,395	262,277	323,806	78,145	60,531	132,723	3,542,369
1973–74	1,434,433	1,084,662	668,810	313,146	396,897	95,969	63,682	157,296	4,214,897
1974–75	1,597,224	1,206,375	699,869	398,525	450,535	116,980	60,450	185,218	4,715,176
VALUE OF WORK YET TO BE DONE ON BUILDINGS UNDER CONSTRUCTION AT END OF YEAR									
1970–71	549,064	274,561	110,131	98,807	110,402	32,691	27,352	74,785	1,277,793
1971–72	571,933	320,543	123,509	96,994	86,784	30,464	22,566	71,852	1,324,645
1972–73	718,760	513,407	191,238	114,264	128,519	45,458	37,661	92,092	1,841,398
1973–74	881,364	656,436	275,866	174,549	169,563	60,058	76,115	140,131	2,434,079
1974–75	834,290	622,514	250,137	171,384	143,825	62,591	73,330	168,104	2,326,175

The following table shows the values of approvals for dwellings, other new buildings, and alterations and additions in Australia. From 1966–67 to 1972–73 alterations and additions of $10,000 and over were included with new dwellings and new other building. From 1973–74 alterations and additions (of $10,000 and over) to new dwellings are shown separately but, for other building, new work and alterations and additions continue to be shown combined.

VALUE OF BUILDING APPROVED, AUSTRALIA

($'000)

Type of building	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New dwellings	1,448,099	1,647,218	2,292,016	2,652,776	2,246,223
Alterations and additions to dwellings	(*a*)	(*a*)	(*a*)	67,223	100,785
Other building	1,318,143	1,391,684	1,660,326	1,884,275	1,786,302
Total building . . .	**2,766,241**	**3,038,901**	**3,952,336**	**4,604,267**	**4,133,308**
Private	2,127,384	2,401,544	3,222,570	3,674,272	2,821,362
Government	638,855	637,359	729,757	930,004	1,311,950

(*a*) Included with new dwellings.

The following tables show the value of *all buildings completed* in each State and Territory during 1974–75 and in Australia during the years 1970–71 to 1974–75, according to the *class of building* (1970-71 to 1974-75) and *ownership* (1972-73 to 1974-75). The classification of non-residential buildings by type of building is according to the function a building is intended to serve.

VALUE OF BUILDINGS COMPLETED, BY CLASS OF BUILDING, 1974-75

($'000)

Class of building	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
New houses—									
Brick, concrete and stone . .	53,766	28,186	33,592	88,274	145,001	4,114	(*a*)3,799	3,995	(*a*)360,727
Brick veneer .	392,838	449,799	185,650	61,096	33,221	40,983	(*a*)1,637	88,000	(*a*)1,253,224
Wood (weather-board, etc.) .	16,423	9,864	34,690	1,376	317	1,268	(*a*)30	13	(*a*)63,981
Asbestos-cement .	58,070	22,200	50,030	15,844	19,228	1,430	(*a*)2,845	..	(*a*)169,647
Other . . .	7,625	1,497	5,056	155	839	361	(*a*)1,318	23	(*a*)16,874
Total new houses .	528,722	511,546	309,017	166,744	198,605	48,154	13,269	92,031	1,868,088
New other dwellings	258,159	129,749	86,578	44,916	38,883	10,029	3,537	14,274	586,125
Total new dwellings .	*786,880*	*641,295*	*395,595*	*211,660*	*237,486*	*58,182*	*16,806*	*106,305*	*2,454,209*
Alterations and additions to dwellings . .	53,024	19,075	6,737	3,618	4,428	642	118	4,483	92,125
Hotels, hostels, etc.	22,067	24,344	20,228	5,085	9,905	2,255	1,781	1,498	87,163
Shops	55,664	54,506	30,146	10,967	16,656	3,156	1,189	3,052	175,336
Factories . .	135,102	100,479	34,910	21,684	18,216	5,670	1,748	1,323	319,132
Offices . . .	162,024	87,014	42,823	25,824	18,444	5,720	1,422	28,647	371,918
Other business premises . .	67,524	35,792	25,258	9,323	16,575	4,296	3,963	3,351	166,082
Education . .	82,335	89,578	47,196	33,514	39,965	9,980	1,802	14,138	318,508
Religion . .	7,858	3,120	2,295	758	2,030	825	100	148	17,134
Health . . .	29,408	19,484	9,787	22,442	17,341	3,121	3,338	1,932	106,853
Entertainment and recreation . .	36,783	11,888	14,370	9,889	13,020	1,701	426	1,075	89,152
Miscellaneous . .	33,957	21,702	33,862	12,639	17,958	3,946	2,509	6,633	133,206
Total other buildings .	*632,726*	*447,909*	*260,875*	*152,123*	*170,105*	*40,669*	*18,277*	*61,800*	*1,784,484*
Total buildings	**1,472,629**	**1,108,278**	**663,206**	**367,403**	**412,020**	**99,494**	**35,201**	**172,588**	**4,330,819**

(*a*) Excludes the value of new houses completed in Darwin in December quarter 1974 for which details are not available.

VALUE OF BUILDINGS COMPLETED, BY CLASS OF BUILDING, AUSTRALIA

($'000)

Class of building	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New houses—					
Brick, concrete and stone	225,153	279,313	294,196	324,606	(*a*)360,727
Brick veneer	671,991	781,501	932,187	1,114,607	(*a*)1,253,224
Wood (weatherboard, etc.)	74,037	76,829	75,246	69,399	(*a*)63,981
Asbestos-cement	118,297	119,949	123,724	140,788	(*a*)169,647
Other	8,068	13,737	9,558	13,037	(*a*)16,874
Total new houses	1,097,548	1,271,329	1,434,912	1,662,440	1,868,088
New other dwellings	368,427	337,869	387,315	480,538	586,125
Total new dwellings	*1,465,974*	*1,609,195*	*1,822,228*	*2,142,976*	*2,454,209*
Alterations and additions to dwellings	(*b*)	(*b*)	(*b*)	55,594	92,125
Hotels, hostels, etc.	79,263	83,767	95,442	81,969	87,163
Shops	96,355	100,932	137,709	153,410	175,336
Factories	211,204	259,341	199,001	281,392	319,132
Offices	243,621	291,234	318,201	381,130	371,918
Other business premises	156,774	151,082	175,795	130,635	166,082
Education	180,796	214,404	250,185	216,636	318,508
Religion	13,719	12,488	12,263	12,685	17,134
Health	92,037	96,254	102,999	80,224	106,853
Entertainment and recreation	47,929	57,678	65,976	111,766	89,152
Micsellaneous	103,370	114,704	110,481	82,721	133,206
Total other buildings	*1,225,064*	*1,381,885*	*1,468,054*	*1,532,563*	*1,784,484*
Total buildings	**2,691,039**	**2,991,074**	**3,290,283**	**3,731,138**	**4,330,819**

(*a*) Excludes the value of new houses completed in Darwin in December quarter 1974 for which details are not available.
(*b*) Included with new dwellings.

VALUE OF BUILDINGS COMPLETED, BY CLASS OF BUILDING AND OWNERSHIP AUSTRALIA

($'000)

	Private			*Government*		
Class of building	*1972–73*	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
New houses—						
Brick, concrete and stone	286,186	319,687	(*a*)349,972	8,011	4,919	(*a*)10,751
Brick veneer	873,574	1,065,747	(*a*)1,153,904	58,613	48,860	(*a*)99,315
Wood (weatherboard, etc.)	64,118	60,491	(*a*)50,333	11,129	8,908	(*a*)13,651
Asbestos-cement	99,477	115,992	(*a*)134,386	24,249	24,795	(*a*)35,264
Other	8,503	10,833	(*a*)15,432	1,056	2,204	(*a*)1,443
Total new houses	1,331,856	1,572,756	1,706,039	103,057	89,681	162,050
New other dwellings	361,524	445,571	546,939	25,791	34,971	39,183
Total new dwellings	*1,693,380*	*2,018,326*	*2,252,979*	*128,848*	*124,653*	*201,234*
Alterations and additions to dwellings	(*b*)	55,115	91,424	(*b*)	479	703
Hotels, hostels, etc.	91,582	79,716	81,076	3,858	2,253	6,088
Shops	136,430	151,902	173,174	1,280	1,509	2,161
Factories	183,627	259,527	285,181	15,375	21,868	33,951
Offices	241,307	292,027	292,599	76,895	89,096	79,320
Other business premises	107,535	93,517	106,921	68,260	37,121	59,165
Education	30,596	29,215	50,177	219,591	187,417	268,338
Religion	12,263	12,685	17,134	..	..	..
Health	21,695	18,600	31,856	81,304	61,624	74,999
Entertainment and recreation	45,841	52,503	63,293	20,133	59,260	25,858
Miscellaneous	53,880	42,082	53,241	56,600	40,639	79,964
Total other buildings	*924,758*	*1,031,776*	*1,154,645*	*543,296*	*500,788*	*629,841*
Total buildings	**2,618,137**	**3,105,217**	**3,499,040**	**672,145**	**625,920**	**831,777**

(*a*) Excludes the value of new houses completed in Darwin in December quarter 1974 for which details are not available.
(*b*) Included with new dwellings.

Persons working on jobs carried out by builders of new buildings

The following table shows the number of contractors, sub-contractors and wage earners working on jobs *carried out by builders of new buildings* in each State and Territory at 30 June 1975. It also shows the numbers of these persons classified according to their main building occupations and the type of building on which they were working.

NUMBER OF PERSONS WORKING ON BUILDING JOBS, BY OCCUPATIONAL STATUS AND BY OCCUPATION

30 JUNE 1975

Including Contractor and Sub-contractor Principals Actually Working on Jobs but Excluding Persons Working on Owner-built Houses

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.(a)*	*A.C.T.*	*Aust.*
Contractors	4,382	3,253	1,999	1,044	759	387	20	367	12,211
Sub-contractors	9,068	9,651	5,240	3,706	2,963	829	93	1,758	33,308
Wage earners	30,868	16,118	18,722	9,268	12,959	4,250	517	4,652	97,354
Carpenters	13,671	10,271	10,034	3,704	4,028	2,041	201	1,659	45,609
Bricklayers	4,932	4,104	2,261	2,125	2,336	512	76	790	17,136
Painters	2,906	2,281	1,730	1,155	1,480	403	35	421	10,411
Electricians	2,987	1,924	1,443	976	1,354	329	45	330	9,388
Plumbers	3,849	2,950	2,103	1,297	1,582	362	45	477	12,665
Builders' labourers	7,106	2,540	3,329	1,914	2,108	1,021	141	1,031	19,190
Other	8,867	4,952	5,061	2,847	3,793	798	87	2,069	28,474
New dwellings	17,374	17,186	10,910	6,832	7,661	2,196	327	3,289	65,775
Other buildings(*b*)	23,692	11,214	12,651	6,900	7,404	3,005	286	3,144	68,296
Repairs and maintenance(*c*)	3,252	622	2,400	286	1,616	265	17	344	8,802
Total	**44,318**	**29,022**	**25,961**	**14,018**	**16,681**	**5,466**	**630**	**6,777**	**142,873**

(*a*) Excludes Darwin. (*b*) Includes persons working on alterations and additions carried out by builders of new buildings. (*c*) Carried out by builders of new buildings.

The number of persons in each State and Territory working on jobs *carried out by builders of new buildings* at the end of June in recent years is shown in the following table.

NUMBER OF PERSONS WORKING ON BUILDING JOBS

Including Contractor and Sub-contractor Principals Actually Working on Jobs but Excluding Persons Working on Owner-built Houses

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971	58,816	42,243	25,050	13,474	17,792	5,734	2,643	5,828	171,580
1972	60,376	41,106	26,171	14,509	15,497	4,964	1,875	5,581	170,079
1973	57,237	44,541	30,733	15,983	17,609	5,406	2,152	7,186	180,847
1974	55,044	45,630	30,111	15,753	19,302	5,223	2,044	6,950	180,057
1975	44,318	29,022	25,961	14,018	16,681	5,466	(*a*)630	6,777	142,873

(*a*) Excludes Darwin.

Average value and average size of private contract built houses

The following table shows the average commencement value, average value per square metre and average size in square metres of *private contract* built new houses commenced in each State Capital City Statistical Division. The average commencement value and average value per square metre are based on the final contract price of houses when complete (or estimates of this price) provided by contractors at the time of commencement of building work.

AVERAGE COMMENCEMENT VALUE, AVERAGE VALUE PER SQUARE METRE AND AVERAGE SIZE OF NEW PRIVATE CONTRACT BUILT HOUSES COMMENCED: CAPITAL CITY STATISTICAL DIVISIONS(*a*)

Period	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	*Canberra*	*All capital cities*
AVERAGE COMMENCEMENT VALUE ($)								
1972–73	16,651	14,056	13,244	13,752	12,944	15,647	19,370	14,422
1973–74	19,770	17,743	16,480	17,020	15,381	18,708	23,860	17,723
1974–75	23,858	22,035	19,805	21,623	18,270	24,316	27,551	21,744
AVERAGE VALUE PER SQUARE METRE ($)								
1972–73	114.5	101.9	109.9	105.3	98.4	114.5	122.0	106.5
1973–74	124.4	117.2	126.6	119.2	102.9	127.8	144.4	119.5
1974–75	155.8	150.2	150.4	153.8	125.5	171.9	189.1	150.3
AVERAGE SIZE (SQUARE METRES)								
1972–73	145	138	121	131	132	137	159	135
1973–74	159	151	130	142	149	146	165	148
1974–75	153	147	132	141	146	141	146	145

(*a*) Statistical Divisions, except for Canberra.

Intercensal estimates of stock of dwellings

The following table shows statistics of the estimated number of self-contained dwelling units at 30 June 1974 and 1975. For purposes of comparison the number of self-contained dwelling units at the Censuses of Population and Housing, 30 June 1966 and 1971 are also shown. Self-contained dwelling units include those private dwellings embraced by the 1971 Census categories 'private house', 'villa unit' and 'self-contained flat'. Dwellings which are embraced by the 1971 Census category 'other private dwellings' are excluded from the statistics. For further detail *see* page 208.

The estimated number of dwelling units for 1974 and 1975 represents the stock as ascertained at the Census of Population and Housing, 30 June 1971, plus the number of new dwelling units completed, minus an estimate of the net loss resulting from demolitions less conversions since the Census. Intercensal estimates of dwelling stock subsequent to 1971 will be subject to revision following the availability of more accurate benchmark information from the 1976 Census of Population and Housing.

INTERCENSAL ESTIMATES OF STOCK OF DWELLINGS

State	Census, 30 June 1966	*Census 30 June 1971*		*30 June 1974 (estimate)*		*30 June 1975 (estimate)*		
			Annual rate of increase since Census 30 June 1966		*Annual increase since Census 30 June 1971*		*Annual increase since 30 June 1972*	*Annual rate of increase since Census 30 June 1971*
	No.	No.	per cent	No.	per cent	No.	per cent	per cent
Sydney Statistical Division	729,513	870,195	3.6	945,774	2.8	966,760	2.2	2.7
Remainder of State	494,560	568,234	2.8	621,915	3.0	642,364	3.3	3.1
Total New South Wales	*1,224,073*	*1,438,429*	*3.3*	*1,567,689*	*2.9*	*1,609,124*	*2.6*	*2.9*
Melbourne Statistical Division	629,288	765,956	4.0	839,742	3.1	863,559	2.8	3.0
Remainder of State	281,550	311,143	2.1	328,517	1.8	337,136	2.6	2.0
Total Victoria	*910,838*	*1,077,099*	*3.4*	*1,168,259*	*2.8*	*1,200,695*	*2.8*	*2.8*
Brisbane Statistical Division	216,425	256,732	3.5	291,993	4.3	302,204	3.5	4.2
Remainder of State	247,224	287,095	3.0	322,968	4.0	334,149	3.5	3.9
Total Queensland	*463,649*	*543,827*	*3.2*	*614,961*	*4.2*	*636,353*	*3.5*	*4.0*
Adelaide Statistical Division	223,529	261,253	3.1	289,953	3.5	298,776	3.0	3.4
Remainder of State	91,837	105,413	2.8	112,575	2.2	115,582	2.7	2.3
Total South Australia	*315,366*	*366,666*	*3.0*	*402,528*	*3.2*	*414,358*	*2.9*	*3.1*
Perth Statistical Division	159,185	212,429	5.9	246,707	5.1	256,720	4.1	4.8
Remainder of State	72,526	90,224	4.4	99,445	3.3	103,044	3.6	3.4
Total Western Australia	*231,711*	*302,653*	*5.4*	*346,152*	*4.6*	*359,764*	*3.9*	*4.4*
Hobart Statistical Division	38,918	45,723	3.3	50,117	3.1	51,723	3.2	3.1
Remainder of State	65,501	73,872	2.4	78,524	2.1	80,197	2.1	2.1
Total Tasmania	*104,419*	*119,595*	*2.8*	*128,641*	*2.4*	*131,920*	*2.5*	*2.5*
Darwin	4,464	7,994	12.4	11,050	11.4	n.a.	n.a.	n.a.
Remainder of Territory	2,571	5,866	18.0	7,592	9.0	7,751	2.1	7.2
Total Northern Territory	*7,035*	*13,860*	*14.5*	*18,642*	*10.4*	*n.a.*	*n.a.*	*n.a.*
Canberra	23,745	38,654	10.3	50,153	9.1	55,369	10.4	9.3
Remainder of Territory	637	598	—1.3	721	6.4	730	1.3	4.9
Total Australian Capital Territory	*24,382*	*39,252*	*10.0*	*50,874*	*9.0*	*56,099*	*10.3*	*9.3*
Capital City Statistical Divisions(*a*)	2,025,067	2,458,936	4.0	2,725,489	3.5	2,795,111	2.6	3.3
Remainder of States	1,256,406	1,442,445	2.8	1,572,257	2.9	1,620,953	3.1	3.0
Total Australia	3,281,473	3,901,381	3.5	4 297,746	3.3	4,416,064	2.6	3.1

(*a*) Includes Canberra and Darwin.

Government activities in the housing field

Housing Agreements between Commonwealth and State Governments

Under successive Housing Agreements with the States the Commonwealth Government has made substantial long-term loans to the States for the provision of housing.

The 1945 Agreement. In November 1945 the Commonwealth Government entered into an Agreement with the Governments of the States whereby it would provide finance for housing projects and the State Governments would undertake the building of such projects. Between 1945–46 and 1955–56, under this Agreement, the Commonwealth Government advanced to the States a total of $481,118,000.

Initially, dwellings constructed under the 1945 Agreement were only sold to tenants if the tenant was able to arrange payment of the full purchase price to the State immediately on sale. Subsequent amendments to the Agreement progressively eased conditions of sale. For information on the conditions of sale, etc., under the 1945 Agreement *see* Year Book No. 48, page 367.

The 1956 Agreement. In 1956 the Commonwealth and State Governments entered into a new Agreement under which added emphasis was placed on the construction of dwellings for private ownership. The Agreement provided that part of the loans advanced to each State was to be advanced to building societies and other approved institutions for lending to private home builders and purchasers. The balance of the amounts advanced to each State was used by the States for the erection of dwellings for either rental or sale. The Commonwealth Government was entitled to specify that up to five per cent of the moneys allocated for the erection of dwellings by the State be set aside for the erection of dwellings for serving members of the defence forces. For features of the 1956 Commonwealth and State Housing Agreement *see* Year Book No. 48, pages 367–8.

The 1961 Agreement. The period during whch advances to the States could be made under the 1956 Agreement terminated on 30 June 1961. A new Agreement was entered into which extended for a further five years the period during which advances could be made and also amended the 1956 Agreement in certain respects concerning funds for the erection of dwellings for rental to servicemen and the rate of interest payable on Commonwealth Government advances.

The 1966 Agreement. An agreement was entered into which extended for a further five years the period during which advances could be made, and also amended the 1956–1961 Agreement in certain respects concerning the definition of 'member of the forces', the erection by the States of blocks of flats in metropolitan areas, the standard of dwellings to be built for rental to servicemen, and the provision of finance to home builders in rural areas.

For further information regarding the 1961 and 1966 Agreements *see* Year Book No. 53, pages 276–7, and Year Book No. 58, pages 208–9.

States Grants (*Housing*) *Act* 1971. The 1956–66 Housing Agreement expired on 30 June 1971 and was not further renewed. Instead, the Commonwealth and State Governments agreed upon a new arrangement under which the provisions contained in the Housing Agreement would be substantially continued for a period of five years up to 30 June 1976. In accordance with the Act financial assistance is being made available principally in the form of non-repayable interest-free grants for specific purposes.

For further information regarding the *States Grants* (*Housing*) *Act* 1971 *see* Year Book No. 59, page 210.

Housing Agreement (Servicemen)

An Agreement was concluded between the Commonwealth and State Governments to take effect for five years from 1 July 1971, to provide separately for the erection by the States of dwellings for allotment to servicemen and to carry out improvements to existing pre-1966 stock to upgrade the standard of accommodation. Both construction and improvements programs are negotiated annually for which the full capital cost is advanced by the Commonwealth Government as required by the States.

1973–1974 Housing Agreement

From 1 July 1973, advances are made by the Commonwealth Government to the States for welfare housing under this Agreement. This arrangement replaced that contained in the States Grants (Housing) Act from that date, with the exception that the Rental Assistance Grant of $1.25 million will continue to be paid in respect of each financial year to and including 1975–76.

The rate of interest payable on advances made during the five-year term of the Agreement will be constant at the very low figure of 4 per cent for advances to the State Housing Authorities and 4.5 per cent for advances allocated to the States' Home Builders' Accounts for lending to eligible prospective home owners.

Sales of houses completed by the State Housing Authorities in the five years commencing 1 January 1974 are limited to 30 per cent of the total, except in the case of Tasmania where the limit is somewhat higher. The remainder are added to the stock of houses retained for rental to eligible persons and families. Eligibility for State Housing Authority accommodation is limited, in the case of a family, by a needs test whereby the income of the main breadwinner should not be greater than 85 per cent of average weekly earnings, plus $2 for each child beyond the second. The needs test to determine eligibility for Home Builders' Account loans is slightly higher.

Operations under the 1973–1974 Housing Agreement and the Housing Agreement (Servicemen)

The following table shows the results of operations under the 1973–1974 Housing Agreement and the Housing Agreement (Servicemen) during 1974–75. Corresponding figures for 1972–73 appear in Year Book No. 60, page 227.

1973-74 HOUSING AGREEMENT: SUMMARY 1974-75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
HOUSING FUNDS $'000							
Allocation of State loan moneys for housing	123,411	98,159	43,810	56,360	37,440	26,220	385,400
State housing authorities(*a*)	74,910	61,800	31,340	33,560	20,570	18,220	240,400
Home builders' account(*a*)	48,501	36,359	12,470	22,800	16,870	8,000	145,000
Amounts drawn by institutions	67,929	56,185	17,170	26,800	18,742	9,120	195,947
Housing Agreement (Servicemen) advances	16,350	4,193	5,200	130	784	149	26,805
NUMBER OF DWELLINGS							
State housing program—							
Commenced	4,658	2,899	1,378	1,169	620	739	11,463
Completed	2,977	2,746	1,359	862	723	704	9,371
Under construction at 30 June 1975	4,989	2,476	545	1,651	435	465	10,561
Home builders' account—							
Purchased—							
New	748	524	410	1,867	269	52	3,870
Other	2,214	1,675	343	356	..	461	5,049
New construction—							
Approved	3,943	3,374	1,053	3,031	1,172	705	13,278
Commenced	1,361	972	343	650	856	213	4,395
Completed	1,252	1,068	370	453	945	201	4,289
Service housing—							
Agreed program	113	..	303	50	..	..	466
Completed(*b*)	376	131	23	..	1	2	533
Sold under—							
1973–74 Housing agreement	66	559	4	174	93	216	1,112
Earlier agreements	1,217	1,524	1,300	22	515	99	4,677

(*a*) Between 20 and 30 per cent of total advances to a State in a financial year must be allocated to Home Builders' Accounts, the balance being allocated to State Housing Authorities. (*b*) Also included in State housing program above and may include completions of houses for servicemen programmed in previous years.

Dwellings for Aged Pensioners Scheme

This Scheme is directed towards those in the community considered to be most in need of housing assistance. These are single eligible pensioners living alone in unsuitable private accommodation and paying too high a proportion of their pensions in rent. Most State housing authorities have for many years been building accommodation for aged persons, and Commonwealth Government assistance under this Scheme was introduced to supplement the States' efforts and to effect a more rapid reduction in the waiting lists with State housing authorities.

Under the *States Grants* (*Dwellings for Aged Pensioners*) *Act* 1969 an amount of $25 million was made available to the States over a period of five years from 1969–70 to 1973–74 for construction by them of single self-contained accommodation for allocation, at rents they can afford to pay, to single eligible pensioners in receipt of supplementary assistance under the *Social Services Act* 1947 or the *Repatriation Act* 1920.

The Scheme was extended for a further period of 3 years from 1974–75 by the *States Grants* (*Dwellings for Pensioners*) *Act* 1974 which makes $30 million available to the States over that period.

Building Schemes approved so far under the Acts are shown in the following table.

DWELLINGS FOR PENSIONERS SCHEME: APPROVALS

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Number of building schemes approved—							
1971–72	27	2	20	13	13	6	81
1972–73	16	7	24	1	3	3	54
1973–74	..	..	2	1	1	..	4
1974–75	28	35	8	2	3	..	76
Number of units in approved schemes—							
1971–72	636	192	154	190	108	35	1,315
1972–73	248	96	169	8	27	18	566
1973–74	..	..	56	2	44	..	102
1974–75	667	394	97	28	68	..	1,254
Estimated cost of approved schemes—							
1971–72 $'000	5,871	1,785	1,286	1,068	603	262	10.875
1972–73 $'000	1,894	773	1,444	50	152	108	4,421
1973–74 $'000	..	..	665	13	284	..	962
1974–75 $'000	8,395	5,988	1,489	353	625	..	16,850

Defence service homes

The *Defence Service Homes Act* 1918, formerly the *War Service Homes Act* 1918, makes provision for assistance to be granted to persons who satisfy the eligibility conditions set out in the Act, to enable them to acquire on concessional terms a soundly constructed home that they would occupy as a residence.

Persons eligible for assistance under the Act include members of the Australian forces and nursing services enlisted or appointed for or employed on active service outside Australia or on a ship of war during the 1914–18 and 1939–45 Wars, persons who served in the warlike operations in Korea or Malaya or who have served on 'special service' as defined in the *Repatriation* (*Special Overseas Service*) *Act* 1962 and members of the Forces who serve on continuous full-time service and national servicemen whose periods of service ended not earlier than 7 December 1972 and meet certain prescribed conditions. The categories of eligible persons also include the widow and, in some circumstances, the widowed mother of an eligible person and persons domiciled in Australia and employed in certain sea-going service during the 1914–18 and 1939–45 Wars.

The maximum amount of loan or advance which may be granted under the *Defence Service Homes Act* 1918 is $15,000. The maximum period of repayment is 45 years or, in the case of the widow or widowed mother of an Australian ex-serviceman, 50 years, but normally the repayment period is restricted to not more than 32 years.

The Australian Housing Corporation is responsible for the execution of the Defence Service Homes Act, subject to the directions of the Minister for Environment, Housing and Community Development.

Operations under the Defence Service Homes Act

The following tables give details of the operations under the Defence Service Homes Act in the year 1974–75 and from the inception of the scheme on 6 March 1919 to 30 June 1975. The earliest single year for which details are given in the tables is 1970–71; for earlier years *see* previous issues of the Year Book. The figures shown include operations in Papua New Guinea and Norfolk Island.

DEFENCE SERVICE HOMES ACT: OPERATIONS, AUSTRALIA, 1974-75 AND TO 30 JUNE 1975

		1974–75			
		Eligibility established from following service—			
		1914–18 War	*1939–45 War Korea, etc.(a)*	*Regulars and National Servicemen serving on or after 7 December 1972*	*Total*
Applications received	No.	200	11,038	3,344	14,582
Applications approved	"	118	7,771	2,070	9,959
Homes purchased	"	94	4,491	1,255	5,840
Homes built, or assistance given to build them	"	3	1,051	190	1,244
Mortgages discharged	"	13	1,480	287	1,780
Total homes provided	"	*110*	*7,022*	*1,732*	*8,864*
Transfers and resales	"	7	289	37	333
Total capital expenditure	$'000	n.a.	n.a.	n.a.	130,000
Total receipts	"	n.a.	n.a.	n.a.	(b)91,640

		From inception to 30 June 1975			
		Eligibility established from following service—			
		1914–18 War	*1939–45 War Korea, etc.(a)*	*Regulars and National Servicemen serving on or after 7 December 1972*	*Total*
Applications received	No.	119,700	475,963	6,870	602,533
Applications approved	"	58,942	290,466	3,385	352,793
Homes purchased	"	20,759	156,595	2,182	179,536
Homes built, or assistance given to build them	"	24,168	74,351	206	98,725
Mortgages discharged	"	4,372	40,476	337	45,185
Total homes provided	"	*49,299*	*271,422*	*2,725*	*323,446*
Transfer and resales	"	9,691	16,881	65	26,637
Total capital expenditure	$'000	n.a.	n.a.	n.a.	1,798,076
Total receipts	"	n.a.	n.a.	n.a.	(c)1,371,474

(a) Korea, Singapore, Malaysia or Vietnam (Southern Zone) and Vietnamese waters. (b) All receipts for year less repayments under Widow's Relief Scheme. (c) Includes interest paid on expenditure on account of Widows' Relief Scheme.

DEFENCE SERVICE HOMES ACT: OPERATIONS, AUSTRALIA

	Number of						
		Homes provided					
Year	*Applications received*	*Homes purchased (a)*	*Homes built(b)*	*Mortgages discharged*	*Total*	*Total capital expenditure*	*Total receipts*
						$'000	$'000
1970–71 . .	10,174	5,031	1,040	1,231	7,302	61,000	78,483
1971–72 . .	11,465	5,025	830	1,266	7,121	65,000	83,496
1972–73 . .	11,687	4,990	919	1,467	7,376	74,326	97,622
1973–74 . .	15,494	6,223	715	1,356	8,294	102,000	101,467
1974–75 . .	14,582	5,840	1,244	1,780	8,864	130,000	91,640

(*a*) Homes purchased with assistance under the Defence Service Homes Act. (*b*) Or assistance given to build a home.

DEFENCE SERVICE HOMES ACT: ADVANCES FOR HOUSING AND NUMBER OF HOMES PROVIDED

Period or date	*N.S.W. (a)*	*Vic.*	*Qld (b)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
TOTAL CAPITAL ADVANCED DURING YEAR ($'000)									
1970–71 .	23,052	16,850	9,721	4,288	4,675	1,530	92	792	61,000
1971–72 .	21,680	18,770	11,095	5,971	4,623	1,670	89	1,102	65,000
1972–73 .	23,858	21,497	13,443	6,137	5,986	2,050	71	1,284	74,326
1973–74 .	30,171	27,149	17,400	10,418	9,500	3,200	162	4,000	102,000
1974–75 .	37,925	32,250	22,785	11,867	16,400	3,220	133	5,420	130,000
NUMBER OF SECURITIES IN FORCE									
At end of June—									
1971 .	65,028	55,116	25,446	16,621	17,954	4,245	61	1,236	185,707
1972 .	64,731	55,338	25,683	16,710	17,769	4,295	69	1,318	185,913
1973 .	63,590	54,933	25,497	16,618	17,597	4,341	68	1,399	184,043
1974 .	62,699	54,379	25,527	16,603	17,576	4,397	73	1,671	182,925
1975 .	63,035	54,363	26,181	16,879	18,095	4,484	67	2,022	185,126
VALUE OF ADVANCES OUTSTANDING ($'000)									
At end of June—									
1971 .	352,150	271,295	120,595	77,469	87,091	20,848	(*c*)	(*d*)	929,448
1972 .	354,389	276,348	125,180	79,367	86,641	21,466	(*c*)	(*d*)	943,391
1973 .	354,216	280,040	128,229	80,762	86,843	22,263	(*c*)	(*d*)	952,353
1974 .	363,071	288,556	135,961	84,624	90,336	23,997	(*c*)	(*d*)	986,545
1975 .	382,562	302,077	150,560	91,341	101,351	25,901	(*c*)	(*d*)	1,053,792
NUMBER OF HOMES PROVIDED									
1970–71 .	2,785	1,989	1,180	537	512	191	11	97	7,304
1971–72 .	2,330	2,078	1,248	664	463	202	10	126	7,122
1972–73 .	2,302	2,173	1,298	648	597	218	9	131	7,371
1973–74 .	2,449	2,245	1,434	757	783	280	14	332	8,294
1974–75 .	2,402	2,172	1,544	836	1,245	251	10	404	8,864

(*a*) Includes Norfolk Island. (*b*) Includes Papua New Guinea. (*c*) Included in South Australia. (*d*) Included in New South Wales.

In addition to the homes provided under the Defence Service Homes Act and shown above, 3,299 homes, which had been provided originally under the Housing Agreements with the States, have been taken over in accordance with those Agreements.

Home Savings Grant Scheme

The administration of the Homes Savings Grant Scheme is a function of the Department of Environment, Housing and Community Development. The purpose of the Scheme is to assist young married persons, and young widowed or divorced persons with dependent children, to purchase or build their own homes. A further objective is to increase the proportion of total savings available for housing purposes by encouraging young people to save with those institutions which provide the the bulk of housing finance. The Scheme is governed by the *Homes Savings Grant Act* 1964. The Act authorises the payment of grants from the National Welfare Fund.

The Scheme provides for the payment of grants of $1 for every $3 saved by eligible persons under 36 years of age for the first home they own after marriage. The savings must be made over a period of at least three years and held in an approved form. The maximum grant to a married couple, or to husband or wife if only one is eligible, or to a widowed or divorced person, is $750 on savings of $2,250 or more. Smaller grants down to a minimum of $10 are payable on lesser amounts saved. To be eligible for the grant, a person must be married, or widowed or divorced with one or more dependent children, and must have—or must be married to a person who has—entered into a contract to buy a home or have one built, or begun to build a home as an owner-builder. The person must be under 36 years of age at the time of marriage and at the date of the contract to buy or build or the date building began; must have either been an Australian citizen or lived in Australia during the three years immediately preceding that date; and must also have saved in Australia in an approved form throughout that period. Those three years are known as the applicant's 'savings years'. The grant is payable in respect of existing homes and homes being built. Flats and home-units may also be eligible provided separate title can be obtained. The value of the home, including the land, the house itself and any other improvements, must not exceed $22,500. Most homes are eligible, the main exception being homes purchased from State housing authorities which have been built with moneys advanced by the Commonwealth Government under the Housing Agreements at concessional rates of interest or where the terms of purchase have been subsidised by reason of financial assistance to the State under the *States Grants (Housing) Act* 1971.

The main forms of savings acceptable under the Scheme are accounts with savings banks and fixed deposits with trading banks (but not cheque accounts), and deposits with or shares in registered building or co-operative housing societies. Savings spent in connection with the purchase or construction of the home prior to the date of the contract to buy or build the home, or the date building began, are also acceptable. Savings held with a credit union are acceptable provided the particular credit union has become an approved credit union for the purposes of the Scheme. The amount of savings that qualify for a grant is the sum of the amounts by which the acceptable savings have increased each year, up to a limit of $900 in any one savings year, added to the acceptable savings held at the start of the three-year savings period.

Full details of the current Scheme are set out in the official pamphlet *A Grant for Your Home* available from banks, building and housing societies, post offices, and offices of the Department of Environment, Housing and Community Development throughout Australia. Additional statistical information is contained in the Annual Reports by the Secretary, Department of Housing and Construction, on the *Homes Savings Grant Act* 1964–1975, which are available from the Australian Government Publishing Service Bookshops.

The Government announced on 31 March 1976 proposals for a new Home Savings Grant Scheme to apply to persons who contract to buy or build their first home on or after 1 January 1977. Under the new scheme, all persons buying or building their first home may qualify for a grant regardless of age, marital status or residence in Australia, provided that, in the case of newcomers to Australia, they have a right of permanent residence. The maximum grant payable on the basis of $1 for $3 savings will be $2,000 where acceptable savings have been held for not less than three complete years immediately before the date of the contract to buy or build the home. Maximum grants of $667 and $1,333 will be payable where acceptable savings have been held for not less than one and two completed years respectively. There will be no limit to the value of the home that may qualify under the new scheme.

Other changes, that will also apply to persons qualifying under the present scheme who contract to buy or build their first matrimonial home on or after 1 April 1976, are the removal of the restrictions on persons buying homes subsidised by the Commonwealth, persons building on a rural property to which they do not hold title, persons whose applications are lodged later than 12 months after the contract date, and persons whose savings are held in credit unions that have not been approved under the scheme.

Operations under the Home Savings Grant Scheme

Particulars of applications received and approved during 1974–75 and during the period from 20 July 1964, when the Scheme commenced to operate, to 30 June 1975 are set out below.

HOME SAVINGS GRANT SCHEME: OPERATIONS, 1974-75

		N.S.W.	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas.*	*A.C.T. (b)*	*Aust.*
Applications received	No.	4,559	6,165	3,692	2,780	2,315	1,089	24	20,624
Applications approved(*c*)	,,	4,531	5,814	3,796	2,718	2,338	1,062	55	20,314
Grants approved	$'000	2,881	3,770	2,409	1,684	1,440	628	32	12,845
Average grant approved	$	636	648	635	620	616	591	532	632
Expenditure from National Welfare Fund	$'000	2,949	3,954	2,419	1,689	1,493	626	33	13,163

(*a*) Includes Northern Territory. (*b*) Includes Queanbeyan, N.S.W. (*c*) Includes applications received on or before 30 June 1974 and approved after that date.

HOME SAVINGS GRANT SCHEME: OPERATIONS, 1970-71 TO 1974-75 AND TO 30 JUNE 1975

Year	*Applications received*	*Applications approved*	*Grants approved*	*Average grant approved*	*Expenditure from National Welfare Fund*
			$'000	$	$'000
1970–71	39,796	35,778	15,763	441	15,200
1971–72	41,735	38,674	16,970	439	17,397
1972–73	47,260	40,847	21,343	523	21,287
1973–74	41,609	40,278	24,814	616	24,658
1974–75	20,624	20,314	12,845	623	13,163
Total from 20 July 1964	**388,753**	**350,361**	**167,093**	**477**	**166,936**

Homes qualifying for grants

The following two tables contain particulars of homes in respect of which grants were approved during 1974–75. As grants were payable only to persons under 36 years of age and in respect of homes costing no more than a prescribed amount, these statistics should not be regarded as being applicable to home owners in general.

HOME SAVINGS GRANT APPLICATIONS APPROVED(*a*): MANNER OF ACQUISITION TOTAL VALUE, AND AVERAGE VALUE OF HOMES (INCLUDING LAND), 1974-75

		N.S.W.	*Vic.*	*Qld*	*S.A.(b)*	*W.A.*	*Tas.*	*A.C.T.(c)*	*Aust.*
Purchase of house(*d*)—									
Number of approvals		2,703	3,807	2,516	1,840	1,316	832	23	13,037
Total value(*e*)	$'000	47,999	69,499	42,949	32,986	21,593	12,416	470	227,911
Average value(*e*)	$	17,757	18,256	17,070	17,927	16,408	14,923	20,451	17,482
Purchase of flat or home unit—									
Number of approvals		600	73	42	170	86	8	3	982
Total value(*e*)	$'000	12,056	1,370	797	3,029	1,399	144	58	18,853
Average value(*e*)	$	20,093	18,769	18,966	17,819	16,273	17,975	19,283	19,198
Home built under contract—									
Number of approvals		1,051	1,643	998	655	900	138	28	5,413
Total value(*f*)	$'000	19,995	31,915	18,702	12,683	16,866	2,581	575	103,316
Average value(*f*)	$	19,024	19,425	18,740	19,364	18,739	18,702	20,533	19,087
Owner-built home—									
Number of approvals		177	291	240	53	36	84	1	882
Total value(*g*)	$'000	2,775	5,420	3,849	912	637	1,477	21	15,090
Average value(*g*)	$	15,676	18,625	16,036	17,215	17,683	17,583	20,909	17,109
All homes—									
Number of approvals		4,531	5,814	3,796	2,718	2,338	1,062	55	20,314
Total value	**$'000**	82,823	108,204	66,296	49,611	40,495	16,617	1,124	365,170
Average value	**$**	18,279	18,611	17,465	18,253	17,320	15,647	20,437	17,976

(*a*) Includes applications received on or before 30 June 1974 and approved after that date. (*b*) Includes Northern Territory. (*c*) Includes Queanbeyan, N.S.W. (*d*) Includes previously occupied houses. (*e*) Usually based on the purchase price. (*f*) Usually based on the cost of the land and the contract price of the dwelling. (*g*) Usually based on the cost of the land and the assessed value of the dwelling.

HOME SAVINGS GRANT APPLICATIONS APPROVED: METHOD OF FINANCING HOMES AND AVERAGE MORTGAGE LOANS, 1974-75

	Method of financing homes					
State or Territory	*With first mortgage loan and without second mortgage loan*	*With first and second mortgage loans*	*Others(a)*	*Total*	*Average first mortgage loan(b)*	*Average second mortgage loan*
	number	number	number	number	$	$
New South Wales	3,868	520	143	4,531	13,080	3,543
Victoria	5,041	405	368	5,814	12,941	3,513
Queensland	3,439	173	184	3,796	12,774	3,277
South Australia(*c*)	1,977	630	111	2,718	12,778	3,208
Western Australia	2,051	186	101	2,338	12,505	3,871
Tasmania	941	58	63	1,062	11,978	2,703
Australian Capital Territory(*d*)	15	39	1	55	11,988	5,685
Australia	**17,332**	**2,011**	**971**	**20,314**	**12,817**	**3,457**

(*a*) Homes financed without mortgage loan. Includes homes financed from the applicants' own resources only, with personal or unsecured loans, purchased under a terms contract of sale, etc. (*b*) Includes homes financed with and without second mortgage loans. (*c*) Includes Northern Territory. (*d*) Includes Queanbeyan, N.S.W.

Housing loan interest deduction scheme

The housing loan interest deduction scheme, which commenced operation from 1974–75, provides for the allowance of an income tax deduction for housing loan interest payments. The amount of the deduction that may be allowed to a taxpayer in respect of his or her housing loan interest payments is governed by a 'net income' test. Under this test a person with a net income of $4,000 or less in a year of income is allowed the whole of his or her annual housing loan interest payments as a concessional deduction. A person with a net income greater than $4,000 in a year of income is allowed a deduction for the amount of his or her annual housing loan interest payments, reduced by 1 per cent for each $100 of the excess of the net income over $4,000 (e.g., a net income of $6,000 means 80 per cent of interest is deductible). No deduction is available to a person whose net income for the year is $14,000 or more.

'Net income' for purposes of the scheme means gross income (including exempt income but not child endowment or payments received by way of domiciliary nursing care benefits) less revenue expenses incurred in the course of earning the income. Expenses of a capital nature, private or domestic expenditures that are rebatable in the income tax return (e.g., medical expenses, education expenses, life insurance premiums, contributions to superannuation funds) and the concessional rebates for dependants, are not taken into account in calculating 'net income'.

In measuring the deduction, the net income of the taxpayer is combined with the net income of his or her spouse. The net income of other members of the family is not taken into account.

Arrangements under the pay-as-you-earn (PAYE) income tax scheme enable allowance for deductible housing loan interest payments to be made in tax instalments deducted from salary or wages of employees. Further details of the PAYE arrangements are set out in the notes provided on the housing loan interest declaration form available at Taxation Offices and Post Offices.

Under the housing loan interest deduction scheme as amended from 1976–77, housing loan interest is available as a taxation deduction only to borrowers who are making repayments in respect of the first home they have purchased and is restricted to interest that accrues during the first five years of use of that home.

Housing loans insurance scheme

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965 to insure approved lenders against losses arising from the making of housing loans. The main purpose of the activities of the Corporation is to assist people to borrow, as a single loan, the money they need and can afford to repay to obtain a home suited to their requirements.

The Corporation will insure loans of up to $40,000. The maximum loan to valuation ratio is 95 per cent for loans for the purchase or construction of homes. A once-and-for-all premium of 1.4 per cent of the amount of the loan is charged by the Corporation for the insurance of loans representing 94 per cent or more of valuation. The premium rate falls progressively to a minimum of 0.25 per cent on loans of less than 76 per cent of valuation. The premium normally is paid by the borrower, but lenders may agree to add it to the amount of the loan for repayment by the borrower over the duration of the loan. The maximum period for repayment of a loan on the purchase or construction of a home is forty years.

The Corporation insures loans for purposes other than the purchase or construction of a dwelling. These include alterations, extensions or improvements to a dwelling. An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Minister for Environment, Housing and Community Development. The approved classes include banks, permanent and terminating building societies and most other sources of housing finance. The Corporation commenced its operations in November 1965. By the end of December 1975, 197,199 loans to a value of $2,623.7 million had been insured.

State housing authorities

The following paragraphs describe briefly the organisation of the various State housing authorities and their activities in the fields of home construction and provision of homes on a rental basis (*see* pages 239–42 for their financial advances to persons wishing to purchase or build a home). For summarised figures of total government construction of houses and other dwellings, *see* pages 218, and 221. For a fuller description of the activities of State housing authorities and their financial advances to home purchasers or builders *see* Year Book No. 53, pages 283–91.

New South Wales—The Housing Commission of New South Wales. The Housing Commission of New South Wales was constituted in 1942, its principal function being the provision of low-cost housing to persons in the lower or moderate income groups.

Advances from the Commonwealth Government have provided most of the Housing Commission's capital funds and by 30 June 1975 had aggregated $739,067,000 of which $85,979,000 had been repaid. Other net funds of the Commission at 30 June 1975 comprised repayable advances from the State, $102,914,000; public loans raised by the Commission, $10,657,000; grants from the Commonwealth Government, $13,750,000; grants from the State, $23,383,000 (including $9,275,000 from consolidated revenue and $14,108,000 from taxes on poker machines); provision for maintenance of properties, $5,281,000; and accumulated surplus, $71,640,000. In addition, the Commission owed $37,353,000 to creditors, mainly for purchase, of land and work-in-progress. These funds were represented by fixed assets, $903,037,000 (including $220,896,000 debtors for purchase of homes) and current assets, $15,029,000. In 1974–75, the Commission's income was $75,882,000 (including rent $49,401,000 and interest $14,302,000), expenditure $65,004,000 (interest, $27,932,000), and capital expenditure $138,866,000.

Most of the permanent dwellings provided by the Commission have been erected under the Federal-State Housing Agreements. In 1974–75, 3,752 houses and flats, valued at $46,127,918, were completed for the Housing Commission by private builders on contract to the Commission.

Upon request by other State Departments the Housing Commission will erect houses for employees of those Departments, the Departments providing the necessary lands and funds. In addition, the Commission erects (with State funds) dwellings for employees of industries connected with decentralisation and development. Specially designed units are erected by the Housing Commission to provide dwellings for elderly persons at rentals within their means. The rents of these units, as at 30 June 1975, are approximately $7.90 a week for elderly single persons and $11.70 a week for elderly couples, and 8,447 units had been completed at 30 June 1975.

Victoria—Ministry of Housing. The Ministry of Housing co-ordinates all Government housing activities in Victoria. The authorities within the Ministry are the Housing Commission, Registry of Co-operative Housing Societies and Co-operative Societies, Home Finance Trust (*see* page 240), Decentralised Industry Housing Authority and Teacher Housing Authority.

Housing Commission, Victoria. The Housing Commission, Victoria, was set up in 1938 as a result of the Housing Act of the previous year. The main objects of the Commission as now laid down are the improvement of existing housing conditions; the provision of suitable rental housing for persons displaced by slum reclamation or living under unsatisfactory conditions, and for persons of limited means; the sale of houses to eligible persons and the making of advances to such persons to enable them to own their homes; the development of land for housing and related purposes; the giving of advice to the public with respect to finance for the purchase or construction of homes;

the preparation and implementation of urban renewal proposals; and, since December 1974, the performance of the functions of the former Ministry of Aboriginal Affairs relating to aboriginal housing. Since the signing of the 1945 Housing Agreement the construction of dwellings has been financed by the Commonwealth Government and Commission Funds.

At 30 June 1975, the Housing Commission had completed 1,328 dwelling units under the State Housing Scheme and 78,542 dwelling units under Federal-State Agreements, Works and Services Loans, Service Personnel Agreements (Housing) and Grants for Aged Person Housing. Specially designed dwelling units are erected by the Commission to provide dwellings for elderly persons at rentals within their means. To 30 June 1975, 6,326 such units had been completed. These are also included in the figures for total constructions above.

Queensland—The Queensland Housing Commission. The Queensland Housing Commission was established in 1945 to assist in meeting the housing shortage. In addition, the Commission was empowered to build houses itself, either for sale or for rental.

The Housing Commission finances its operations through a Treasury Trust Fund—the Queensland Housing Commission Fund. A second fund, the Commonwealth-State Housing Fund, was closed on 30 June 1973. Total disbursements by the Commission for the year 1974–75 amounted to $75,799,347.

During 1974–75 the Commission provided 2,283 dwelling units, bringing the total number under all schemes since the revival of housing construction in 1944–45 to 49,045. Of this number 29,555 houses, or 60.3 per cent, were for home ownership, and 19,490 or 39.7 per cent, were for rental.

In the field of rental housing the Commission administers and acts as the constructing authority under the Federal-State Housing Agreements and the *States Grants (Dwellings for Pensioners) Act* 1974 and *States Grants (Housing) Act* 1971–1974. Operating under the provisions of the *State Housing Act* 1945–1974, the Commission, through its scheme of workers' dwellings, makes advances for the construction of dwellings to eligible persons who own a suitable building site. The number of workers' dwellings completed during 1974–75 amounted to 101, making a total of 31,420 completions since the inception of the scheme. The Commission also has power to make advances, secured by mortgage, to firms for housing of employees. The Commission has power to sell houses under contract of sale conditions. Contract of sale agreements were made to purchase 1,305 of the Commission's houses during 1974–75.

South Australia—The South Australian Housing Trust. The South Australian Housing Trust operates under the South Australian Housing Trust Act, 1936–1973 and the Housing Improvements Act, 1940–1973 for the purpose of providing houses for families of limited means. Houses are built for both rental and sale, and to 30 June 1975, 77,053 had been completed throughout the State, of which some 40,880 had been built and sold under various schemes. At 30 June 1975 the rents of five-roomed (i.e. three bedrooms) double-unit houses ranged from $12.50 a week for houses of an older type to $16.50 a week for houses then being completed. Single units rent ranged between $20.50 and $30.00. Two-and three-storey groups of flats with weekly rentals ranging from $15.00 to $24.00 and $14.00 to $26.00 per flat respectively have been built in the Metropolitan Area; of these 1,698 flats are situated in the Metropolitan Area and 360 at Elizabeth. In 1953 the Trust began building cottage or pensioner flats for elderly people. At 30 June 1975 it had built 1,657 cottage flats from its own resources and an additional 867 for charitable and non-profit organisations.

During 1962–63 the Trust commenced construction of rental-purchase houses. The aim of this scheme is to provide less expensive houses for the lower income groups. It is expected that such houses will, to some extent, replace double-unit type rental houses. The Trust has also undertaken the construction of houses for various State Government Departments which need to house staff in country districts. In order to assist primary producers the Trust will erect houses on the applicant's own land for his own use or that of his employees, either using local materials or transporting pre-fabricated houses to the site.

The Trust is also responsible for administering all houses financed through the State Aboriginal Advancement Scheme in accordance with policies formulated by the Aboriginal Housing Policy Committee. The Committee comprises 6 Aboriginal members, and a representative from the Department for Community Welfare, the Department of Aboriginal Affairs and the Trust. The Trust provides all the normal housing management services for the houses; at the end of June 1975 a total of 514 had been built or purchased in South Australia.

Western Australia—State Housing Commission of Western Australia. The activities of the State Housing Commission extend throughout the whole State. In addition to construction of a variety of dwellings for its own rental and purchase program as determined under the State Housing Act, the

Federal State Housing Agreements prior to 30 June 1971, the *States Grants (Housing) Act* 1971 and the 1973–1974 Housing Agreement, its activities include:

Construction of houses for other Government Departments (both Commonwealth and State Government, and semi- and local government authorities) in Western Australia,

Construction and maintenance of houses for the Government Employees' Housing Authority.

At 30 June 1975, the Commission had completed under all schemes since 30 June 1944, a total of 61,783 units of accommodation throughout the State (including 12,046 units completed under the *Defence Services Homes Act* 1918).

During the twelve months ended 30 June 1975, 1,150 units of accommodation were completed: metropolitan area, 757; country, 224; and north of 26th parallel, 169; and a further 682 units were under construction.

Building Societies are a major source of housing finance in Western Australia. At 30 June 1975, it was estimated that the assets of all societies were about $719 million. Currently, 11 permanent and 498 terminating societies are operating. As a condition of eligibility for assistance under the *Housing Agreement Act* 1973, the State is required to allocate not less than 20 per cent nor more than 30 per cent of its housing authority new borrowings for advances through terminating building societies.

Under the *Housing Loans Guarantee Act* 1957–1972, the guarantees provided to financial institutions enable loans to be made to lending institutions with full security. The Act enables building societies and other approved bodies to make high ratio advances to families of low and moderate means without additional charge. The interest rate charged to the borrower may not exceed 10.75 per cent reducible. Loans may be made up to 95 per cent of the value of the house and land or a specified sum, whichever is the lesser amount. In respect of the metropolitan region, the maximum loan permitted is $17,000 and outside the metropolitan region south of the 26th parallel, $16,000. For a new house situated north of the 26th parallel and in the North West or Eastern Land Divisions, the maximum loan is $35,000 and in the Kimberley Land Division $36,000.

Tasmania—The Housing Department. The Housing Department was established in 1953 and administers that portion of the *Homes Act* 1935 relating to the acquisition and development of land for housing purposes and the erection of homes for rental and sale by purchase contract, and the *Casual Worker's and Unemployed Persons' Homes Act* 1936.

During 1974–75, 751 dwellings were completed, comprising mainly brick and concrete block veneer construction. Construction since 1944 has totalled 15,187 dwelling units, comprising 14,028 detached and semi-detached units (9,857 of timber), 637 elderly persons' flatettes, 206 multi-unit flats and 316 higher density villa units.

Flats, maisonettes, villa units, and elderly persons' homes are for rental only. Single unit dwellings may be allotted on either a purchase contract or rental basis. Weekly rental of a new typical standard home approximated $29.00 in the June quarter 1975. In certain necessitous cases rental rebates are allowed. Under current policy, a married couple occupying an elderly persons' unit and whose only income is the age pension, pay $10.00, while a single person solely dependent on the pension pays $7 a week.

Most purchase contract allotments are made on a no-deposit basis with repayments over a maximum period of fifty-three years. The sale price of a 3 bedroom standard unit was approximately $20,000 (including land) in June 1975.

Housing schemes in Australian Territories

Northern Territory. In 1946 control of all government-owned residences in the Territory (excluding those belonging to the Defence Services or Commonwealth Railways, or attached to post offices) was vested in the Administration. The Northern Territory Housing Commission was established in 1959 and operates under authority of the *Housing Ordinance* 1959–1971. The Commission became autonomous on 1 October 1969 and provides rental housing for persons of limited means who are not adequately housed and who are not officers of either the Commonwealth or the Northern Territory Public Service. To 30 June 1973 the Commission had completed a total of 3,553 houses and flats; 2,453 of these are in Darwin (including 490 flats), 691 in Alice Springs (including 191 flats); 182 in Katherine (including 29 flats); 206 in Tennant Creek (including 15 flats); 9 houses in Pine Creek; 8 houses in Adelaide River and 2 each in Elliot and Mataranka. In addition, 49 houses and 8 flats were taken over from the Department of Defence in Alice Springs; 2 houses in Katherine and 1 house in Tennant Creek were acquired from the Department of the Northern Territory; and 1 house in Darwin was purchased privately. A further 1 house and 10 flats were under construction.

Australian Capital Territory. The Commonwealth Government provides houses and flats for rental to persons on low incomes who are employed in the Australian Capital Territory. At 30 June 1975 the Department of the Capital Territory controlled 8,000 houses and 2,688 flats for rental purposes. Government rental houses may be purchased by eligible tenants.

Summary of rental activities of government authorities

The first of the following two tables shows the revenue from rental for dwellings under control of government housing authorities each year from 1970–71 to 1974–75, and the second, the number of tenants paying rent for dwellings under control of government housing authorities at the end of each year 1970–71 to 1974–75.

GOVERNMENT HOUSING AUTHORITIES: REVENUE FROM RENTALS
($'000)

Year	*N.S.W.*	*Vic.*	*Qld(a)*	*S.A.(b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71	29,851	20,618	9,286	14,300	10,076	2,152	(c)3,387	5,300	94,970
1971–72	32,813	22,274	10,405	15,700	11,378	2,315	3,366	5,744	103,995
1972–73	36,726	22,778	11,407	17,150	12,209	2,578	4,335	5,598	112,781
1973–74	42,378	26,820	12,104	18,730	12,791	3,404	n.a.	5,555	121,782
1974–75	49,401	31,049	13,959	22,271	15,810	4,281	n.a.	7,479	144,250

(*a*) Excludes rentals in respect of tenanted temporary dwellings. (*b*) Excludes rentals in respect of temporary and emergency dwellings. (*c*) Includes undercharges in respect of 1969–70.

GOVERNMENT HOUSING AUTHORITIES: NUMBER OF TENANTS PAYING RENT

Year	*N.S.W.*	*Vic.*	*Qld(a)*	*S.A.(b)*	*W.A.*	*Tas.(c)*	*N.T.*	*A.C.T.(c)*	*Aust.*
1970–71	63,983	38,237	17,038	33,378	22,056	3,951	3,710	10,567	192,920
1971–72	66,740	39,694	17,670	34,382	23,236	4,158	4,261	10,048	200,189
1972–73	69,178	40,335	18,463	35,155	24,055	4,560	4,826	9,651	206,223
1973–74	70,510	39,996	18,183	35,592	24,304	4,841	n.a.	9,506	202,932
1974–75	73,021	40,726	18,947	36,752	25,767	5,350	n.a.	10,481	211,044

(*a*) Excludes tenanted temporary dwellings. (*b*) Excludes temporary and emergency dwellings. (*c*) Number of occupied dwellings at 30 June.

Advances to home purchasers

Many prospective home purchasers wish to borrow for the purpose of constructing or purchasing their own homes. Usually the loan is covered by way of mortgage of the home to be constructed or bought. Such loans are provided from a number of private sources and from agencies owned or guaranteed by the Commonwealth or State Governments. The information in this section concerns the direct loans made to home purchasers by the more important institutional lenders. Loans to institutions which in turn lend moneys to home purchasers and loans to contract builders, etc. are excluded as far as possible. The loans may be for the construction of new dwellings, the purchase of existing dwellings, for additions, renovations, etc., as first or subsequent mortgages, overdrafts and so on. While figures of all loans to home purchasers are not available, the institutions mentioned account for a significant proportion of total loans. Details of the terms and conditions of lending are given, together with available information on the number and value of loans made.

State and Territory authorities and agencies

New South Wales

Rural Bank of New South Wales—Sale of Homes Agency. A Sale of Homes Agency was established in 1954 to arrange for the sale on terms of houses erected by the Housing Commission of New South Wales. The Agency's operations began with the sale to selected purchasers of 100 houses made available by the Commission during 1954–55 and 1955–56. The sales were made on the basis of 10 per cent deposit and repayment of the balance over a maximum period of forty years, with interest at 4.5 per cent per annum. Total advances under that scheme amounted to $646,648; at 30 June 1975 the advances outstanding amounted to $189,654 in respect of 48 houses.

Since 1956 the Sale of Homes Agency has acted as the agent of the Housing Commission in arranging the sale on terms of houses erected under the Federal-State Housing Agreements. The terms of sale provide for a minimum deposit of $200 and repayment of the balance over a maximum period of forty-five years, with interest rates, since the inception of the scheme, ranging from 4.25 to 6.75 per cent per annum. Particulars of the advances made by the Agency in connection with the sale of houses erected under the 1956, 1961 and 1966 Agreements and the *States Grants* (*Housing*) *Act* of 1971 are given in the following table.

RURAL BANK OF NEW SOUTH WALES—SALE OF HOMES AGENCY ADVANCES FOR HOMES SOLD UNDER THE 1956, 1961 AND 1966 FEDERAL-STATE HOUSING AGREEMENTS AND THE STATES GRANTS (HOUSING) ACT OF 1971

	Advances during year		*Total advances to end of year*		*Advances outstanding at end of year(a)*	
Year	*Number of houses*	*Amount*	*Number of houses*	*Amount*	*Number of houses*	*Amount*
		$'000		$'000		$'000
1970–71 . . .	2,080	22,144	25,867	200,359	21,953	160,426
1971–72 . . .	1,978	24,827	27,845	225,186	23,130	177,309
1972–73 . . .	974	13,970	28,819	239,156	22,942	180,438
1973–74 . . .	76	1,158	28,895	240,313	21,550	167,995
1974–75 . . .	79	1,514	28,974	241,827	20,779	160,422

(*a*) Comprises principal outstanding and loan charges due but not paid.

The Sale of Homes Agency also acts as agent for the Housing Commission in arranging the sale of houses erected by the Commission on applicants' land. Under this scheme persons who have established a housing need may apply to the Commission to have a standard-type dwelling erected on their own land. The houses are sold, at a price equivalent to their capital cost, on the same terms as for houses erected under the 1956 to 1966 Housing Agreements and the *States Grants* (*Housing*) *Act* of 1971. Up to 30 June 1975, 753 houses had been built at a cost of $7,790,000, the balance of indebtedness at that date was $4,807,000.

Rural Bank of New South Wales—Other loans. The Rural Bank of New South Wales provides assistance to individuals for the erection of purchase of homes and for other approved purposes associated with homes. Advances are based on the bank's official valuation of the dwelling. The current rate of interest on long-term loans for housing purposes is 6.75 per cent per annum.

Victoria

Housing Commission of Victoria. Commission policy is to encourage home ownership and of the 78,807 dwelling units built up to 30 June 1975, under the State Housing Scheme, the Federal State Agreements and Housing Grant, a total of 38,431 houses have been sold (22,818 in the metropolitan area and 15,613 in the country).

Home Finance Trust. The Home Finance Trust is a corporate body constituted under the *Home Finance Act* 1962. It is authorised to receive money on deposit, the repayment of which is guaranteed by the Government of Victoria, for the purpose of making loans for housing on the security of first and second mortgages. Under the terms of the Act the Trust is precluded from making loans in certain circumstances.

The number of loans granted by the Trust to 30 June 1975, and subsisting totalled 3,271, on the security of first mortgages and 784 on second mortgages, the amounts involved being $25.5 million and $1.5 million, respectively.

(*See* Savings Banks, page 243, for activities of the State Savings Bank of Victoria.)

Queensland

Queensland Housing Commission. The major housing scheme financed solely by the State Government is the Workers Dwelling Scheme. Under the *State Housing Act* 1945–74, an eligible person who is the owner of a suitable building site may obtain an advance, secured by mortgage on the land, from the Housing Commission for the erection of a workers' dwelling. The Housing Commission also provides finance for the purchase of homes constructed by the Commission to the applicant's design on Commission land under contract of sale. From 13 February 1975, the maximum advance under both schemes was increased from $15,000 to $18,000. Interest on advances in respect of applications lodged on or after 1 October 1971 is chargeable at 5½ per cent, and repayments may be made over periods up to 45 years.

South Australia

South Australian Housing Trust Sales Schemes. Prospective purchasers of Housing Trust houses (other than Rental Purchase houses) may purchase either by paying cash or by paying a deposit and arranging for a loan on security of a first mortgage from any of the recognised lending authorities. In cases where the deposit and the first mortgage so raised are insufficient, the Trust may advance the balance of the house price on security of a second mortgage, the term of which is usually coterminous, but not exceeding 30 years. The interest rate is 9.25 per cent at 30 June and the interest is adjusted quarterly. During 1974–75 the Trust commenced 146 second mortgages valued at $260,380. At 30 June 1975 second mortgages totalled 6,693 and the balance outstanding at that date was $8,500,000. A minimum deposit of $100 is required for houses built under the Rental Purchase Scheme. The balance of the purchase price is repayable to the Trust in weekly instalments over periods up to 40 years at 5.5 per cent interest per annum.

State Bank of South Australia. The State Bank, together with the Housing Trust, are the principal agents of the State Government for the distribution of moneys received under housing assistance arrangements with the Commonwealth Government. During 1974–75 the Bank opened 2,837 new accounts worth $39,500,446 in the Home Builders' Account. The balance of loans outstanding on this account at 30 June 1975, totalled $172,635,370. The Bank administers the Advances for Homes Act, 1928–1972 on behalf of the State Government. However, advances under this Act have virtually ceased and the only funds being made available are for repairs to tenancy houses and for extra bedroom accommodation. The balance outstanding under this Act at 30 June 1975 was $13,415,440. The present maximum housing loan is $18,000, repayable over a period not exceeding forty years at a rate of interest of 6.5 per cent per annum calculated on monthly balances.

(*See* Savings Banks, page 243 for activities of the Savings Bank of South Australia.)

Western Australia

State Housing Commission of Western Australia. Under the State Housing Act (and the Federal State Housing Agreement up to 30 June 1971) the maximum loan is $9,000 by way of mortgage, while under contract of sale the maximum is arrived at by negotiation. The maximum loan is greater in rural areas than in the metropolitan area, depending on the circumstances.

To proceed under the mortgage conditions, a deposit of not less than 10 per cent is required, but under contract of sale the deposit may be as low as $200. The interest rate on all advances is 5.75 per cent per annum and the repayment period is forty-five years. The income eligibility figure varies according to the movement of the basic wage, and currently an applicant in the Metropolitan Area cannot have an income exceeding $6,799 a year, plus $100 for each dependent child under twenty-one years of age. The remainder of the State is divided into 5 zones and the income eligibility varies from $8,797 to $9,597 plus $100 for each dependent child under twenty-one years of age. A second mortgage scheme exists under the State Housing Act, which provides that assistance be limited to those applicants who are building or purchasing new homes, the cost of which, excluding land, does not exceed $10,000. The Commission limits the second mortgage to a maximum of $2,000.

(*See* Savings Banks, page 243, for activities of the Savings Bank Division of the Rural and Industries Bank of Western Australia.)

Tasmania

Housing Department. The interest rate on purchase contract loans as at 1 July 1975, was 5.75 per cent. The number of loans outstanding at 30 June 1975, was 7,922, and the amount outstanding $64,939,287.

Agricultural Bank of Tasmania. The Agricultural Bank, as an approved lending authority under the current Federal State Housing Agreement provides loans under the provisions of the Homes Act to prospective buyers. To be eligible for a loan, an applicant, whose income is subject to a needs test, must be married, about to be married or have dependants for whom it is necessary to provide a home. Loans up to a maximum of $15,000, or 97 per cent of the Bank's valuation of land and dwelling, whichever is the lesser, will be considered on acceptable proposals throughout Tasmania. Such loans, currently bearing interest at 5.75 or 6.25 per cent depending on the application of the needs test, are repayable by equated monthly instalments over periods up to thirty years. Other limited funds, not subject to a needs test, are currently available at 8.5 per cent.

During 1974–75, 453 loans totalling $6,148,000 were approved. Since November, 1945, a total of 6,160 loans amounting to $47,304,000 has been approved of which 3,942 have been for the erection of dwellings, and 2,218 for the purchase of existing homes. Total loans outstanding at 30 June 1975 amounted to $30,290,000. The figures exclude advances to co-operative housing societies.

Northern Territory

Loans Scheme. This scheme was commenced in 1953 and is administered by the Home Finance Trustee under the *Housing Loans Ordinance* 1949–1967. Advances may be made for the erection of a house, the purchase or enlargement of an existing house, the completion of a partially erected dwelling, or the discharge of a mortgage already existing. Loans are provided on a deposit of 5 per cent of the first $4,000 and 10 per cent of the balance of the Trustee's valuation up to a maximum of $12,000. The rate of interest charged is 8.25 per cent per annum reducible to 7.25 per cent per annum if instalment payments are made by the due date. The maximum period of repayment is forty-five years for brick houses and twenty-five years for other houses. Up to 30 June 1973, 1,456 loans totalling $8,601,250 had been approved. These were for: erection, 811; purchase, 463; enlargement or completion, 114; discharge of mortgage, 68.

Sales Scheme. Tenants of government-owned houses under the control of the Department of the Northern Territory may purchase the dwellings they occupy either for cash or on terms requiring a minimum deposit of 5 per cent of the purchase price with repayments over a maximum period of forty-five years including interest at 6.25 per cent per annum.

Housing Commission Sales Scheme. Since the November 1963 amendment of the *Housing Ordinance* 1959–1971 the Housing Commission has been permitted to sell its houses to tenants in occupation. The terms require a minimum cash deposit of $200 and repayment of the remainder of the loan over a period not exceeding forty-five years; there is no prescribed limit to the amount of the loan and the rate of interest is fixed by the Commission from time to time.

Australian Capital Territory

Loans to a maximum of $15,000 may be granted by the Commissioner for Housing to enable persons to purchase or build new houses in the Australian Capital Territory. Repayment may be made over a maximum period of thirty-two years. There are two rates of interest applicable to Commissioner for Housing loans. The normal rate of 9¼ per cent applies where the combined gross incomes of breadwinner and spouse exceed 95 per cent of A.C.T. average weekly earnings. For gross incomes below this level, a concessional rate of 5¾ per cent applies. In both instances, an allowance of $2 for each dependent child after the second child is deducted from total gross income. At 30 June 1976, 13,830 houses were under mortgage to the Commissioner.

Government rental houses valued at current market values may be sold to tenants. The basis of the sale is a minimum deposit of 5 per cent of the purchase price fixed by the Department of the Capital Territory with no limit to the amount which may be held on mortgage from the Department. Repayment of the amount covered by mortgage may be made over a maximum period of thirty-two years. There are two rates of interest applicable, the normal rate is 10¼ per cent (less one per cent for payment by the due date) on the first $15,000 and 12½ per cent (less one per cent as above) on the remainder of the mortgage. A concessional rate of 6¾ per cent less one per cent for payment by the due date, applies in situations where the combined incomes of breadwinner and spouse do not exceed 95 per cent of A.C.T. average weekly earnings. In both instances, an allowance of $2 for each dependent child after the second child is deducted from total gross income. To 30 June 1976, 13,265 houses had been sold to tenants.

Savings banks

All savings banks lend funds for housing to both individuals and building societies. Details of savings banks housing finance transactions during the years 1971–72 to 1974–75 are shown in the following table. (*See* the chapter Private Finance for further details.)

SAVINGS BANKS: HOUSING LOANS APPROVED AND BALANCES OUTSTANDING TO INDIVIDUALS
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas.*	*A.C.T.*	*Total*
LOANS APPROVED DURING YEAR								
1971–72	209,365	229,581	81,192	75,768	48,198	18,298	8,090	670,492
1972–73	332,826	389,262	142,221	120,878	76,418	26,630	16,017	1,104,251
1973–74	334,079	426,431	131,761	127,114	95,996	29,709	22,150	1,167,240
1974–75	551,692	664,608	175,254	163,053	133,934	39,046	40,474	1,768,060
BALANCES OUTSTANDING AT END OF YEAR								
1971–72	663,869	915,839	260,540	307,357	166,540	59,782	18,115	2,392,042
1972–73	787,277	1,056,771	320,361	360,280	203,418	70,825	26,344	2,825,276
1973–74	976,476	1,280,816	396,441	423,056	258,514	85,882	39,608	3,460,793
1974–75	1,295,215	1,667,597	504,415	515,284	346,714	104,781	68,285	4,502,291

(*a*) Includes Northern Territory.

State Savings Bank of Victoria. The Bank grants long-term loans to depositors to enable them to build, purchase or improve homes. These loans are granted by both the Credit Foncier and Savings Bank Departments.

The maximum proportion of valuation to be granted as Credit Foncier loan is eighty per cent and the maximum loan is $8,000. Interest is 9.25 per cent and the term of the loan is ten years, subject to renewal. The maximum proportion of valuation granted as Savings Bank Department loan is eighty per cent with no limit on the maximum loan. For a property to be occupied by the borrower the interest rate is at least 9.25 per cent, depending on the amount of the loan. The above conditions are those current as at 31 December 1975 but are subject to review and alteration by the Bank at any time. During the year 1974–75 the Bank advanced $276,656,028 to 16,417 borrowers. At 30 June 1975 the total debt of 89,523 individual borrowers was $817,399,082, while indebtedness of Co-operative Housing Societies and the Home Finance Trust amounted to $4,372,639 and $8,882,204 respectively.

Savings Bank of South Australia. The bank grants mortgage loans for the building or purchase for personal occupation, of existing houses, houses not previously occupied and those to be erected. Normally advances are made up to 85 per cent of the Bank's valuation or 95 per cent where the borrower elects to insure the loan with the Housing Loan Insurance Corporation and pay the necessary premium which may be added to the loan if so desired. The maximum loan period is thirty years and the rate of interest on loans of up to $15,000 is 8.75 per cent per annum; this rate is subject to review at any time. Loans above $15,000 are available at slightly higher interest rates.

During 1974-75 the Bank advanced $46,767,333 by way of housing loans. At 30 June 1975 there were 29,751 housing loans current with a balance outstanding of $231,607,375.

The Rural and Industries Bank of Western Australia (*Savings Bank Division*). The Bank makes loans available through its Savings Bank Division for home purchase or erection and for home improvements. It is the Bank's policy to provide housing funds primarily for dwellings to be occupied by the borrower. There is no upper limit on the amount borrowed nor is there any limit as to term although as a general rule a maximum of 30 years applies. In special circumstances advances up to 95 per cent of purchase price may be granted subject to housing loan insurance. Interest rates at June 30, 1975 ranged between 9.25 per cent and 10.5 per cent per annum reducible depending on the amount borrowed.

The bank undertakes the sub-division and development of land and the erection of homes which are sold under conditions which ensure that the purchasers are genuine home seekers. This activity commenced in May 1967. The number of homes built to 30 June 1975 was 557, whilst another 29 were under construction. In addition, 529 building lots (under certain restrictions) were made available to project builders for the erection and sale of houses. A further 1,722 building lots have been auctioned to the public under restrictions designed to favour genuine home seekers.

Trading banks

Apart from loans by certain State banks as Government agencies (*see* pages 239–42) advances for housing to individuals are also provided by the trading banks. Amounts outstanding in respect of advances to individuals for housing purposes made by the major trading banks were $614 million on the second Wednesday of July 1975 (*see* the chapter Private Finance for further details).

Life insurance companies

The life insurance companies are another source of funds for housing. Details of new loans paid over during the twelve months ended June 1971 to 1975 and amounts outstanding at end of June 1971 to 1975, are given in the following table.

LIFE INSURANCE COMPANIES: HOUSING LOANS PAID OVER AND AMOUNTS OUTSTANDING
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Housing loans paid over during period—					
New South Wales	29,686	30,419	29,348	42,077	29,254
Victoria	21,145	20,004	20,859	29,116	24,075
Queensland	6,921	7,159	6,521	7,942	6,539
South Australia	6,033	5,908	6,216	7,113	6,515
Western Australia	5,335	5,086	4,747	6,157	6,743
Tasmania	1,728	1,751	1,456	1,480	1,928
Northern Territory	40	133	92	363	81
Australian Capital Territory	991	1,459	2,372	2,493	954
Total	**71,879**	**71,918**	**71,607**	**96,745**	**76,088**
Amounts outstanding on housing loans at end of period	442,567	454,476	447,958	474,704	491,135

Registered building societies

There were 6,229 registered building societies operating in Australia during the year ending 30 June 1974 of which 192 are permanent societies and the remainder terminating societies. The permanent societies are, in the main, investment societies which make loans for housing purposes, usually on credit foncier terms, and obtain their funds from share capital, deposits and borrowings from banks and other lending institutions. The terminating societies make loans to members from funds obtained from lending institutions (usually government guaranteed), members' subscriptions and, since 1956, from moneys provided under the Federal-State Housing Agreements. Details of new loans paid over and net advances outstanding for each of the years ended June 1970 to 1974 are given in the following table (*see also* the chapter Private Finance).

REGISTERED BUILDING SOCIETIES
($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T. and N.T.*	*Total*
LOANS PAID OVER DURING YEAR								
1969–70	225,151	54,212	49,276	12,135	91,481	12,008	n.a.	444,263
1970–71	232,138	61,229	54,428	12,951	84,150	8,142	n.a.	453,038
1971–72	309,014	107,627	102,071	14,053	107,007	10,831	15,446	666,049
1972–73	528,573	206,619	191,581	25,277	136,437	20,349	30,291	1,139,127
1973–74	307,132	210,640	228,079	45,804	157,831	19,418	22,060	990,964
NET ADVANCES OUTSTANDING(*a*) AT END OF YEAR								
1969–70	861,985	309,186	162,363	36,466	189,482	42,603	n.a.	1,602,085
1970–71	995,647	338,445	194,708	45,439	253,389	44,930	n.a.	1,872,558
1971–72	1,188,587	408,360	269,939	54,134	331,636	49,473	37,764	2,339,893
1972–73	1,524,037	560,087	401,963	71,982	432,905	60,981	62,559	3,114,514
1973–74	1,628,440	678,359	537,349	106,639	529,196	69,026	76,335	3,625,344

(*a*) Net of borrowing members' funds.

Other lenders

At this time there is little statistical information available on advances made by other lenders such as superannuation and other trust funds, private finance and investment companies, etc. In South Australia advances on first mortgage made by the South Australian Superannuation Fund are granted on a credit foncier basis. Loans are limited to 70 per cent of value unless repayments are insured with an approved insurer, in which case loans of up to 90 per cent of value are made. The interest rate may be varied from time to time, the present minimum rate being 11.00 per cent per annum. The maximum term is 30 years for homes of solid construction, and 20 years for timber-framed homes. At 30 June 1974 there were 4,603 loans current, the principal outstanding totalling $27,287,128. During 1973–74 the value of advances made was $4,257,650.

CHAPTER 10

LABOUR, WAGES AND PRICES

For particulars of the Farm Production Price Index, *see* the chapter Miscellaneous. For current information on the subjects dealt with in this chapter, *see* the *Monthly Review of Business Statistics* (*1.4*) and the *Digest of Current Economic Statistics* (*1.5*) (monthly), also the mimeographed statements *Wage Rates and Earnings* (*6.16*), *Consumer Price Index* (*9.1*), *Consumer Price Index Monthly Food Group Index Numbers* (*9.11*), *Price Index of Materials used in Building other than House Building* (*9.6*), *Price Index of Materials used in House Building* (*9.9*), *Price Index of Materials used in Manufacturing Industry* (*9.13*), *Price Index of Electrical Installation Materials* (*9.5*), *Price Indexes of Metallic Materials* (*9.10*), and *Export Price Index* (*9.2*). For further information on these subjects, except the Export Price Index, *see* the *Labour Report* (*6.7*) issued by this Bureau.

RETAIL PRICES AND PRICE INDEXES

Retail prices of food and groceries and average rentals of houses for years extending back to 1901 have been collected by the Commonwealth Statistician, and in some cases were recorded by the Statisticians of various States for earlier years.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been ascertained at frequent and regular intervals since 1923 and comparable information was ascertained for the month of November in each year from 1914 to 1922. The range of items for which retail prices data are obtained was considerably expanded in 1948 and in later years. Average retail prices of certain food and grocery items in current periods are published in the annual *Labour Report*.

An explanation of the nature and purposes of retail price indexes is given in the various editions of the annual *Labour Report*, together with further particulars of indexes then current. Previous retail price indexes for Australia are briefly described below. The current retail price index, entitled the Consumer Price Index, was published for the first time in August 1960. It was compiled retrospectively to 1948–49. A description of the Consumer Price Index is given on pages 248–50.

Previous retail price indexes

Five series of retail price indexes had been compiled at various times for Australia by the Commonwealth Statistician prior to 1960. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were as follows.

(i) *The 'A' Series Index* (covering food, groceries and house rents) was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June 1938.

(ii) *The 'B' Series Index* (covering food, groceries and rent of 4 and 5 roomed houses) was first compiled in 1925 and continued until December quarter 1953. It was the food and rent constituent of the 'C' Series Index and was designed to replace the 'A' Series Index for general statistical purposes.

(iii) *The 'C' Series Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, and some other miscellaneous items) was first compiled in 1921. It was last issued on its original basis for December quarter 1960. For certain transitional purposes a 'C' Series Index was issued for some quarters after that. This was calculated by varying the index numbers of December quarter 1960 in proportion to movements shown by the Consumer Price Index.

(iv) *The 'D' Series Index*, derived by combining the 'A' and 'C' Series Indexes, was used by the Commonwealth Court of Conciliation and Arbitration from May 1933 to May 1934 and then discontinued.

(v) *The Interim Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, certain services and some miscellaneous items) was first compiled in 1954 with the year 1952–53 as base = 100. As its title indicated, it was constructed as a transitional index. Its compilation was discontinued following its replacement by the Consumer Price Index in June quarter 1960.

An index of retail price movements from 1901 to 1975 is shown on page 254 of this Year Book. It is derived by linking together successive indexes (the 'A' Series, the 'C' Series and the Consumer Price Index) available for that period.

In 1937 the Commonwealth Court of Conciliation and Arbitration introduced a 'Court' Index for the purpose of its system of making automatic quarterly adjustments to the basic wage within its jurisdiction. By decision of the Court the 'Court' Index ceased to be issued by the Industrial Registrar as at December quarter 1953. These 'Court' Index numbers were an arithmetical conversion of the 'C' Series Retail Price Index.

Consumer Price Index

This retail price index was first compiled in 1960, retrospectively to September quarter 1948. A full description of the index is given in *Labour Report* No. 58, 1973. The Consumer Price Index, a chain of 'fixed weight aggregative' indexes linked at short intervals to form a continuous series, was further linked at December quarter 1973. Details of this change were published in the bulletin *Consumer Price Index, March quarter 1974* (Ref. No. 9.1) and in *Labour Report* No. 58, 1973. The index was further linked at September quarter 1974 to exclude the items 'radio and television licences'.

Origin

The list of component items and the weighting pattern of the 'C' Series Retail Price Index, first adopted in 1921, were slightly revised by a Conference of Statisticians in 1936, but otherwise continued almost unchanged until the index was discontinued in 1960. The reasons for this and the circumstances which led to the present Consumer Price Index appear from ensuing paragraphs.

From the outbreak of war in 1939 to late in 1948, periodic policy changes in regard to various war-time controls (including rationing) caused recurrent changes in consumption and in the pattern of expenditure. This rendered changes desirable, but made it impracticable either to produce a new index, or to revise the old one, on any basis that would render the index more representative than it already was of the changing pattern of household expenditure in those years.

When commodity rationing had virtually ceased in the latter part of 1948, action was taken by the Statistician to collect price data of about 100 additional items and to gather information about current consumption and expenditure patterns. This was done to facilitate review of the component items and weighting system of the 'C' Series Retail Price Index in the light of the new pattern of wage-earner expenditure and consumption that appeared to be emerging. But there supervened, in the next few years, conditions which caused wide price dispersion coupled with a very rapid rise in prices and a new sequence of changes in consumption and in the pattern of wage-earner expenditure. Under these conditions it was not possible to devise any new weighting pattern likely to be more continuously representative of conditions then current than was the existing 'C' Series Retail Price Index on the 1936 revision.

A conference of Statisticians considered the matter in June 1953, and resolved (in part) as follows:

'(*a*) that, in view of the persistence of recurrent changes in the pattern of consumer expenditure in the post-war period it is undesirable to make a general revision of the list of items and weighting system of the 'C' Series Retail Price Index at present, unless industrial tribunals expressly desire some revision for special purposes;

(*b*) that an Interim Retail Price Index be compiled with putative weights and components representative, as nearly as may be, of the post-war pattern of consumer usage and expenditure.'

The 'C' Series Index continued to be compiled on its pre-war basis without significant change in procedures. The Interim Retail Price Index was introduced in 1954 and continued until March quarter 1960.

The Interim Index was a transitional index designed to measure retail price variations on the 'C' Series model in terms of post-war consumption weights as emerging in the early 1950's. It embraced a wider range of commodities and services than did the 'C' Series Retail Price Index, but it did not take into account successive major changes in the pattern of expenditure and modes of living that began to occur early in 1950 and through to 1960. These changes could not in fact be detected and measured promptly and incorporated into an index concurrently with their happening. Nor was it envisaged as desirable to adopt fundamentally new procedures in price index construction until it was fully evident that far-reaching procedural changes were necessary to meet the situation that had developed between about 1950 and 1960.

In this period home-owning largely replaced house-renting, the use of the motor car greatly increased and partly replaced use of public transport, and various items of electrical household equipment and television came into widespread use. The impact of these (and other) changes in usage upon the pattern of household expenditure was heightened by disparate movements in prices. Together, they rendered nugatory the attempt to meet the situation by devising a single Interim Retail Price Index. As studies progressed and new data became available it was clear that no single list of items and no single set of fixed weights would be adequately representative as a basis for measuring retail price changes at all times throughout the post-war period. In consequence, the situation was met by compiling the Consumer Price Index constructed as a chain of linked indexes with significant changes in composition and weighting effected at short intervals.

Purpose, scope and composition

The Consumer Price Index is a quarterly measure of variations in retail prices for goods and services representing a high proportion of the expenditure of wage-earner households. The weighting pattern relates to estimated aggregates of wage-earner household expenditures and not to estimated expenditure of an 'average' or individual household of specified size, type, or mode of living. In this way it is possible to give appropriate representation to owner-occupied houses as well as rented houses and to include motor cars, television sets, and other major expenditures which relate to some households and not to others.

Consumer (retail) price indexes are sometimes loosely called 'cost of living indexes' and are thought to measure changes in the 'cost of living'. Neither the Consumer Price Index nor any other retail price index measures those changes in the cost of living that result directly from changes in the mode or level of living. Changes of that kind are matters for consideration apart from price indexes, but the change in prices of goods and services is a very important part of the change in the cost of living and this part is measured by consumer (retail) price indexes.

The Consumer Price Index covers a wide range of commodities and services arranged in the following five major groups:

Food;
Clothing and drapery;
Housing;
Household supplies and equipment;
Miscellaneous.

These groups do not include every item of household spending. It is both impracticable and unnecessary for them to do so. Prices are collected regularly for specified quantities and qualities of a large and representative selection of commodities and services. Movements in the prices of these items when combined in suitable proportions, provide a representative measure of price change as affecting a high proportion of the expenditure of wage-earner households.

Index numbers for sub-groups and special groupings have been compiled and published for the six State capital cities combined for each quarter from December quarter 1963. From December quarter 1968 onwards, information of contributions by index sub-groups to the total index in terms of All Groups Index Points has also been published. These details are shown in the tables on pages 30 to 32 of *Labour Report* No. 58, 1973.

Users of these figures should bear in mind that the Consumer Price Index is designed to measure the proportionate change in retail prices as combined in the five major groups and more particularly the total of the groups. For sub-groups or particular items, the index does not necessarily provide comprehensive and valid measures of price changes in those particular fields. Nor does it necessarily measure the relative influences of those classes of items in aggregate variations in prices. The Consumer Price Index is essentially a combination of selected items under various headings and not a dissection of total household expenditure into its component parts. Details of index numbers for sub-groups and special groupings are published to assist interpretation of movements shown by the Consumer Price Index and also to provide additional data of changes in retail prices.

Structure—a chain of linked indexes

Substantial changes have occurred in consumer usage and patterns of expenditure since the 1939–45 War. In order to keep the weighting pattern representative of current expenditures it has been necessary to construct indexes with additional items and changes in the weighting pattern at intervals, rather than on the basis of a list of items and set of weights that remained unchanged throughout the whole period covered. For the six State capital cities seven series for short periods (namely, from the September quarter of 1948 to the June quarter of 1952, from the June quarter of 1952 to the June quarter of 1956, from the June quarter of 1956 to the March quarter of 1960, from the March quarter of 1960 to the December quarter of 1963, from the December quarter of 1963 to the December quarter of 1968, from the December quarter of 1968 to the December quarter of 1973, from the December quarter of 1973 to the September quarter of 1974, and from the September quarter of 1974 onwards) have therefore been constructed and linked to form a continuous retail price index series known as the Consumer Price Index. (For information regarding these links for Canberra *see Labour Report* No. 58, 1973.)

During each period between links the items and weighting remained unchanged. At times of linking the weighting pattern was altered, and new items (mainly ones that had become significant in household expenditure) were introduced. Under this method, in effect, average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter. The process of linking ensures that the series reflects only price variations and not differences in cost of the old and new lists of items. The introduction of new items and weights by linking does not, of itself, raise or lower the level of the index.

Tabular statements of retail price index numbers

Consumer Price Index

The index has been compiled for each quarter from September quarter 1948 and for each year from 1948–49. 'All Groups' index numbers and 'Group' index numbers for each of the five major groups are compiled and published regularly for the six State capital cities combined and separately and for Canberra. Index numbers for sub-groups and special groupings of the Consumer Price Index for the six State capital cities combined have been compiled and published for each quarter from December quarter 1963 and for each year from 1966–67. The reference base for these indexes is: Year 1966–67 = 100.0.

Index numbers for each quarter are first issued in mimeographed statistical bulletins available from the Commonwealth Statistician about three weeks after the end of the quarter. These bulletins contain comment on the index and on the significant price movements in that quarter. Tables showing index numbers for preceding quarters and years are presented.

The tables on the following pages show Consumer Price Index Numbers (Total All Groups) for the six State capital cities combined and separately and for Canberra for periods from the year 1958–59 (*see* page 251), Consumer Price Index Group Index Numbers for the six State capital cities combined for periods from the year 1958–59 (*see* page 252), and Consumer Price Index Group Index Numbers for each State capital city and for Canberra for recent years and quarters (*see* page 253).

CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS
SIX STATE CAPITAL CITIES AND CANBERRA

(*Base of each index: Year* 1966–67 = 100.0) (*a*)

The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

Period	*State capital cities—combined and separately*							*Canberra*
	Six State capital cities(b)	*Sydney*	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	
Year—								
1958–59	83.6	84.6	82.9	82.1	83.6	83.2	84.1	85.8
1959–60	85.7	86.5	85.3	84.2	86.2	84.8	85.6	87.6
1960–61	89.2	89.6	89.5	87.1	89.8	87.9	90.3	90.3
1961–62	89.6	89.9	89.8	88.4	89.5	88.2	90.7	91.6
1962–63	89.8	90.4	89.7	88.7	89.1	88.7	90.7	91.8
1963–64	90.6	91.4	90.4	89.6	90.2	89.8	91.7	92.5
1964–65	94.0	94.5	94.0	93.0	93.9	92.6	94.6	95.3
1965–66	97.4	97.7	97.5	97.5	97.0	96.1	98.0	98.1
1966–67	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1967–68	103.3	103.2	103.7	103.3	102.9	102.9	104.6	102.6
1968–69	106.0	106.2	106.2	105.5	105.3	105.5	106.1	104.4
1969–70	109.4	110.6	108.7	108.4	108.2	109.4	108.5	107.4
1970–71	114.6	116.8	113.1	114.2	112.5	114.1	112.6	113.0
1971–72	122.4	126.3	119.7	121.6	119.2	120.7	119.9	119.4
1972–73	129.8	133.9	127.2	128.6	126.5	127.3	126.7	126.3
1973–74	146.6	151.3	144.0	146.1	143.9	140.6	142.6	142.8
1974–75	171.1	176.1	167.9	168.7	169.7	166.1	166.7	164.9
Quarter—								
1971—March	115.2	117.4	113.7	115.1	112.9	114.8	113.2	113.6
June	117.2	119.8	115.2	117.2	115.4	116.4	114.6	115.6
September	119.4	123.3	116.5	119.0	116.5	117.2	116.5	117.2
December	122.2	126.0	119.7	121.3	119.1	120.5	120.3	119.4
1972—March	123.4	127.3	120.7	122.6	120.2	121.8	120.9	119.9
June	124.5	128.5	121.9	123.6	121.1	123.1	122.0	120.9
September	126.2	130.3	123.6	124.6	123.0	124.8	123.4	122.6
December	127.7	132.0	125.0	126.6	124.3	125.3	125.1	124.5
1973—March	130.4	134.6	127.8	129.4	127.0	127.8	127.5	127.1
June	134.7	138.8	132.3	133.9	131.6	131.4	130.8	130.9
September	139.6	144.1	136.8	139.4	136.5	134.4	135.2	135.6
December	144.6	149.4	141.9	144.0	141.9	138.6	141.1	140.8
1974—March	148.1	152.8	145.2	147.8	145.4	142.1	144.0	145.0
June	154.1	158.7	151.9	153.1	151.7	147.1	149.9	149.6
September	162.0	167.0	159.4	161.4	159.4	154.3	157.4	157.4
December	168.1	173.0	164.6	166.6	166.4	163.6	165.5	162.7
1975—March	174.1	178.8	170.8	171.1	173.8	169.8	169.3	166.4
June	180.2	185.5	176.7	175.6	179.3	176.7	174.6	173.2
September	181.6	188.2	177.7	178.4	178.2	176.5	175.9	173.0
December	191.7	196.9	188.4	189.6	188.6	187.7	189.1	186.9

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (*b*) Weighted average.

CONSUMER PRICE INDEX: GROUP INDEX NUMBERS WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES

(*Base of each index: Year* 1966–67 = 100.0) (*a*)

Period	*Food*	*Clothing and drapery*	*Housing*	*Household supplies and equipment*	*Miscel-laneous*	*All groups*
Year—						
1958–59	81.6	90.5	72.9	94.4	81.4	83.6
1959–60	84.7	91.5	75.4	95.4	83.2	85.7
1960–61	90.2	93.4	80.8	96.6	85.5	89.2
1961–62	88.6	94.4	84.0	97.9	86.1	89.6
1962–63	87.8	94.7	86.5	97.7	86.6	89.8
1963–64	89.0	95.3	89.1	96.4	87.3	90.6
1964–65	93.9	96.8	92.0	97.2	91.4	94.0
1965–66	98.4	97.9	95.9	98.9	95.8	97.4
1966–67	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1967–68	104.7	102.2	104.5	101.2	102.8	103.3
1968–69	105.8	104.3	109.1	102.9	107.5	106.0
1969–70	108.1	107.5	115.5	104.1	111.6	109.4
1970–71	112.4	111.9	123.5	107.4	117.8	114.6
1971–72	116.8	118.5	133.0	111.7	131.0	122.4
1972–73	125.7	125.8	142.4	115.4	137.5	129.8
1973–74	149.5	143.0	157.8	125.0	150.6	146.6
1974–75	164.0	173.0	187.4	146.6	180 8	171.1
Quarter—						
1971—March	112.3	112.2	124.4	107.8	119.4	115.2
June	114.3	115.1	126.8	109.8	120.7	117.2
September	115.6	115.7	128.8	110.0	125.7	119.4
December	116.7	118.0	132.4	111.3	131.2	122.2
1972—March	117.5	118.8	134.1	112.5	132.8	123.4
June	117.5	121.3	136.6	113.0	134.1	124.5
September	120.1	122.2	138.5	113.7	135.6	126.2
December	121.6	124.3	141.3	114.5	136.5	127.7
1973—March	126.9	125.7	143.1	115.9	137.8	130.4
June	134.0	131.1	146.7	117.6	140.0	134.7
September	141.4	134.9	149.8	120.9	144.0	139.6
December	147.0	140.4	155.5	122.9	149.5	144.6
1974—March	152.0	143.2	158.9	125.9	152.1	148.1
June	157.6	153.6	167.0	130.3	156.8	154.1
September	161.9	161.1	174.8	138.9	167.7	162.0
December	161.6	172.8	184.3	143.7	176.1	168.1
1975—March	163.4	175.2	190.2	149.2	187.2	174.1
June	168.9	182.9	200.3	154.4	192.1	180.2
September	171.6	187.1	207.5	158.1	188.2	181.6
December	176.9	200.0	218.4	162.9	203.2	191.7

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number.

CONSUMER PRICE INDEX: GROUP INDEX NUMBERS SIX STATE CAPITAL CITIES AND CANBERRA

(*Base of each index: Year* 1966–67 = 100.0) (*a*)

The index numbers hereunder are designed to measure movements in retail prices of specified groups of items for specified cities individually. They measure variations from time to time and not differences in price level as between cities.

	Year						*1975*			
City	*1948–49*	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*March quarter*	*June quarter*	*Sept. quarter*	*Dec. quarter*
FOOD GROUP										
Six State Capitals(*b*)	38.2	112.4	116.8	125.7	149.5	164.0	163.4	168.9	171.6	176.9
Sydney . .	37.9	112.8	117.5	126.1	151.5	166.3	166.2	170.3	173.1	179.0
Melbourne . .	38.9	112.7	116.8	125.9	148.8	161.7	159.8	166.2	170.1	175.1
Brisbane . .	36.8	113.5	119.0	127.5	152.5	164.8	163.9	168.7	170.4	176.6
Adelaide . .	38.6	109.5	113.6	123.1	148.3	163.7	163.4	170.0	171.5	176.0
Perth . . .	38.4	112.5	116.4	124.5	141.7	160.9	164.2	171.2	171.9	175.4
Hobart . .	39.1	109.6	112.9	120.0	141.4	158.6	158.1	163.1	168.8	174.8
Canberra . .	37.6	110.7	114.9	123.9	148.6	161.7	160.5	167.7	171.1	178.8
CLOTHING AND DRAPERY GROUP										
Six State Capitals(*b*)	48.9	111.9	118.5	125.8	143.0	173.0	175.2	182.9	187.1	200.0
Sydney . .	49.0	112.0	118.7	125.9	143.6	174.1	176.2	183.6	187.4	200.3
Melbourne . .	48.6	111.5	117.9	125.4	142.3	172.0	174.1	182.2	186.2	199.0
Brisbane . .	47.8	111.7	118.0	125.3	142.0	171.5	173.7	181.2	185.6	198.7
Adelaide . .	49.4	112.6	119.5	127.2	144.2	173.8	176.2	183.9	189.6	202.2
Perth . . .	50.6	112.3	118.9	126.1	143.3	174.2	176.5	184.1	188.5	201.1
Hobart . .	48.2	111.9	118.5	125.6	142.4	171.8	174.0	181.3	186.1	199.7
Canberra . .	49.5	111.7	118.2	125.6	142.4	172.3	174.3	182.2	185.7	200.1
HOUSING GROUP										
Six State Capitals(*b*)	40.5	123.5	133.0	142.4	157.8	187.4	190.2	200.3	207.5	218.4
Sydney . .	41.1	131.6	143.2	154.9	171.5	199.2	200.1	213.2	220.5	230.9
Melbourne . .	41.3	117.8	124.9	133.1	148.3	180.6	184.2	194.7	201.4	210.5
Brisbane . .	41.3	118.3	128.8	136.7	150.3	176.4	179.2	183.4	193.7	200.9
Adelaide . .	38.4	115.9	124.4	133.3	150.6	185.3	191.3	198.2	204.0	221.3
Perth . . .	36.1	125.7	133.7	139.7	149.1	174.2	178.4	184.6	191.2	207.5
Hobart . .	36.8	117.4	124.2	131.8	146.9	180.9	186.0	194.2	199.7	214.5
Canberra . .	41.8	116.3	121.9	128.4	140.2	163.3	165.0	168.2	172.3	194.3
HOUSEHOLD SUPPLIES AND EQUIPMENT GROUP										
Six State Capitals(*b*)	58.3	107.4	111.7	115.4	125.0	146.6	149.2	154.4	158.1	162.9
Sydney . .	59.7	109.3	114.6	118.4	128.2	151.5	153.6	160.8	162.9	167.2
Melbourne . .	55.0	105.8	108.9	112.1	122.0	141.8	144.8	148.8	152.1	157.0
Brisbane . .	58.9	108.5	112.7	116.9	126.6	149.8	152.0	155.1	162.5	166.2
Adelaide . .	64.9	105.4	109.2	113.0	121.9	142.5	146.0	148.7	152.3	159.1
Perth . . .	60.4	107.7	112.7	117.4	125.7	146.8	149.6	156.8	164.5	168.9
Hobart . .	53.4	109.2	116.4	120.3	128.3	149.2	153.2	156.0	160.1	171.8
Canberra . .	61.4	104.7	107.5	111.9	120.0	138.9	141.6	145.1	147.9	152.9
MISCELLANEOUS GROUP										
Six State Capitals(*b*)	44.7	117.8	131.0	137.5	150.6	180.8	187.2	192.1	188.2	203.2
Sydney . .	46.5	120.3	137.4	143.7	155.7	186.5	192.9	198.8	199.3	209.8
Melbourne . .	42.2	115.8	127.1	134.5	149.1	178.6	185.5	189.2	183.2	201.0
Brisbane . .	44.4	117.3	127.7	133.5	148.1	175.4	180.8	184.2	182.6	202.0
Adelaide . .	47.1	118.1	128.3	133.7	146.5	178.9	187.0	191.3	181.0	194.9
Perth . . .	45.4	114.8	124.5	130.4	141.6	172.6	177.6	184.1	175.7	193.7
Hobart . .	43.5	116.6	129.3	136.6	150.0	176.4	180.4	185.2	178.3	198.1
Canberra . .	50.2	119.3	130.4	135.9	149.4	177.6	180.5	189.6	181.8	200.9

(*a*) Figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted to avoid distortions that would occur in rounding off the figures to the nearest whole number. (*b*) Weighted average.

Retail Price Index Numbers, 1901 to 1975

The index numbers shown below are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are: from 1901 to 1914, the 'A' Series Retail Price Index: from 1914 to 1946–47, the 'C' Series Retail Price Index: from 1946–47 to 1948–49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent: and from 1948–49 onwards, the Consumer Price Index.

RETAIL PRICE INDEX NUMBERS: SIX STATE CAPITAL CITIES COMBINED, 1901 TO 1975

(*Base: Year* 1911 = 100.0)

Year	*Index number*	*Year*	*Index number*	*Year*	*Index number*
1901	88	1926	168	1951	313
1902	93	1927	166	1952	367
1903	91	1928	167	1953	383
1904	86	1929	171	1954	386
1905	90	1930	162	1955	394
1906	90	1931	145	1956	419
1907	90	1932	138	1957	429
1908	95	1933	133	1958	435
1909	95	1934	136	1959	443
1910	97	1935	138	1960	459
1911	**100**	1936	141	1961	471
1912	110	1937	145	1962	469
1913	110	1938	149	1963	472
1914(*a*)	114	1939	153	1964	483
1915(*a*)	130	1940	159	1965	502
1916(*a*)	132	1941	167	1966	517
1917(*a*)	141	1942	181	1967	534
1918(*a*)	150	1943	188	1968	548
1919(*a*)	170	1944	187	1969	564
1920(*a*)	193	1945	187	1970	586
1921(*a*)	168	1946	190	1971	621
1922(*a*)	162	1947	198	1972	658
1923	166	1948	218	1973	720
1924	164	1949	240	1974	829
1925	165	1950	262	1975	954

(*a*) November.

International comparisons

The following table shows index numbers of consumer (retail) prices for various countries. Except where otherwise noted, the year 1963 is taken as base (= 100). The index numbers show fluctuations in prices in each country, and do not measure relative price levels as between countries.

INDEX NUMBERS OF CONSUMER (RETAIL) PRICES IN VARIOUS COUNTRIES ALL GROUPS INDEXES

(*Source: Monthly Bulletin of Statistics* of the Statistical Office of the United Nations)
(*Base of each Index: Year* 1970 = 100.0)

Period	*Australia (a)*	*Belgium (b)*	*Brazil (Sao Paulo) (c)*	*Canada*	*France*	*Federal Republic of Germany*	*India*	*Indonesia (Djakarta)*	*Italy*	*Japan (d)*	*Netherlands*
1970 .	100	100	100	100	-100-	100	100	100	100	-100-	100
1971 .	106	104	121	103	106	105	103	104	-105-	106	-108-
1972 .	112	-110-	100	108	112	111	110	111	111	111	116
1973 .	123	118	116	-116-	120	119	128	146	123	124	125
1974 .	142	133	144	129	136	127	165	205	146	154	137
1975 .	163	150	188	143	153	135	175	244	171	172	151
Quarter—											
1974—											
March	133	125	128	123	129	125	146	190	134	145	132
June .	138	130	142	127	134	127	159	203	142	151	136
Sept.	145	136	149	131	139	128	175	207	150	157	138
Dec. .	150	140	158	134	143	130	180	219	159	164	143
1975—											
March	156	144	170	137	147	132	176	229	165	166	146
June .	161	148	181	140	151	135	177	239	169	172	150
Sept.	163	151	195	145	154	136	175	246	173	174	153
Dec. .	172	155	206	148	157	137	170	262	178	178	156

Period	*New Zealand*	*Norway*	*Pakistan (Karachi) (e)*	*Philippines (Manila) (f)*	*Singapore (g)*	*South Africa (h)*	*Sweden*	*Switzerland*	*United Kingdom*	*United States of America*	*West Malaysia*
1970 .	100	100	100	100	100	-100-	100	100	100	100	100
1971 .	110	106	105	123	102	106	107	107	109	104	102
1972 .	118	114	105	143	104	113	114	114	117	108	105
1973 .	128	122	127	153	128	124	122	124	128	114	116
1974 .	142	-134-	164	215	122	138	134	136	148	127	136
1975 .	163	130	198	235	126	157	147	145	184	139	
Quarter—											
1974—											
March	136	130	149	187	120	131	130	132	139	122	132
June .	139	132	156	209	121	135	131	133	147	125	135
Sept.	144	135	171	232	123	141	133	137	151	129	137
Dec. .	149	138	180	231	126	146	140	141	158	133	141
1975—											
March	-154-	144	188	234	127	150	141	143	167	135	143
June .	160	147	198	232	125	155	144	145	183	137	141
Sept.	165	152	202	235	126	159	149	146	191	140	142
Dec. .	172	154	206	238	125	163	152	146	197	142	

(*a*) Consumer Price Index converted to base: 1970 = 100. (*b*) Excluding rent. (*c*) Beginning 1972 base: 1972 = 100. (*d*) Excluding Okinawa prefecture. (*e*) Prior to 1972: Karachi only: industrial workers. Beginning 1972, base: 1971 = 100. (*f*) Prior to 1970, low income group. Beginning 1970, middle income group. (*g*) Beginning 1974, new series, base: 1973 = 100. (*h*) White population.

The items priced and the levels at which they are priced in these indexes vary widely according to the intended purposes of the indexes of the various countries.

The index numbers show fluctuations in prices in each country and do not measure relative price levels as between countries.

NOTE. Symbol — on each side of an index number (e.g. —95—) indicates that two series have been linked during that period. Symbol —— between two index numbers indicates that it is not possible to link two series (because of change in scope, etc.) and therefore the index numbers are not comparable with each other even though they may be shown on the same base period.

WHOLESALE PRICE INDEXES

The Australian Bureau of Statistics compiles a range of wholesale price indexes relating to materials used by defined areas of the economy. These indexes are described in this section. Another price index relating to articles produced by manufacturing industry is currently being developed.

Two special purpose measures, the Price Index of Electrical Installation Materials and Price Indexes of Copper Materials used in the Manufacture of Electrical Equipment, are also published by the Bureau.

Price Index of Materials used in Building other than House Building

This index was introduced in April 1969. It measures changes in prices of selected materials used in the construction of buildings other than houses and 'low-rise' flats (in general, those up to three storeys). Its composition is in accordance with the materials usage in actual building projects which were selected as representative for the purpose.

The reference base of the index is the year 1966–67 = 100.0. The weighting base corresponds broadly with the reference base, but does not exactly coincide because of the nature of the data from which the weights were derived. The index is a fixed-weights index and is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Prices are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. They relate to specified standards of each commodity and are obtained in all State capital cities from representative suppliers of materials used in building.

The index has been compiled for each month from July 1966, and for the financial years from 1966–67. Index numbers for the financial years are simple averages of the relevant monthly index numbers.

Further information concerning the method of compiling the index, as well as more detailed group index numbers for each capital city, will be found in the publication *Price Index of Materials used in Building other than House Building* (*9.6*) of 23 April 1969 and subsequent issues, as well as in the *Labour Report* No. 58, 1973 and in Year Book No. 60, 1974.

PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING GROUP INDEX NUMBERS—WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0) (*a*)

	Concrete mix, cement, sand, etc	*Cement products*	*Bricks, stone, etc*	*Timber, board and joinery*	*Steel and iron products*	*Aluminium products*
Value weight (%)	*10.41%*	*3.64%*	*5.28%*	*11.90%*	*30.58%*	*6.01%*
1970–71 . . .	113.0	118.0	118.6	117.0	115.8	113.0
1971–72 . . .	120.6	126.1	124.2	123.4	125.4	119.3
1972–73 . . .	124.5	135.0	130.1	132.9	130.3	125.4
1973–74 . . .	136.0	147.7	146.3	160.2	148.8	138.4
1974–75 . . .	164.6	183.9	179.4	194.7	189.2	169.2

	Other metal products	*Plumbing fixtures*	*Miscellaneous materials*	*Electrical installation materials*	*Mechanical services components*	*All groups*
Value weight (%)	*2.59%*	*1.19%*	*7.09%*	*8.61%*	*12.70%*	*100.00%*
1970–71 . . .	121.4	121.3	110.3	110.9	119.0	115.5
1971–72 . . .	120.6	134.3	116.9	114.7	127.7	123.0
1972–73 . . .	126.4	143.5	124.5	120.5	132.4	128.9
1973–74 . . .	158.5	159.6	134.2	138.3	143.9	145.8
1974–75 . . .	162.7	197.7	163.4	157.4	181.3	179.2

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING ALL GROUPS INDEX NUMBERS—SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0) (*a*)

NOTE. The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

	State capital cities						*Weighted average of six State capital cities*
	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	
1970–71 . .	116.4	115.1	116.4	113.9	113.3	115.0	115.5
1971–72 . .	122.4	123.9	124.4	122.7	121.3	122.6	123.0
1972–73 . .	127.2	131.2	130.4	129.8	126.3	129.7	128.9
1973–74 . .	144.1	148.0	149.0	145.8	142.9	143.8	145.8
1974–75 . .	176.0	180.6	186.6	181.0	176.7	179.3	179.2

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

Price Index of Materials used in House Building

This index was introduced in November 1970. It measures changes in prices of selected materials used in the construction of houses. Its composition is in accordance with the usage of materials in actual houses which were selected as representative for the purpose.

In the interests of uniformity and ease of use, the reference base of the index is the year 1966–67 = 100.0, the same as that used for the Price Index of Materials used in Building other than House Building. However, because of the later time at which the weighting source data were collected, the weighting base approximates more closely to the year 1968–69. The index is a fixed weights index and is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Prices are collected as at the mid-point of the month to which the index refers, or as near thereto as practicable. They relate to specified standards of each commodity and are obtained in all State capital cities from representative suppliers of materials used in building.

The index has been compiled for each month from July 1966, and for the financial years from 1966–67. Index numbers for the financial years are simple averages of the relevant monthly index numbers.

Further information concerning the method of compiling the index, as well as more detailed group index numbers and the separate weighting patterns for the six State capital cities, will be found in the publication *Price Index of Materials used in House Building* (*9.9*) of 27 November 1970. This and subsequent issues are available on request. A full description of the index is also given in *Labour Report* No. 58, 1973 and in Year Book No. 60, 1974.

PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING GROUP INDEX NUMBERS—WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0) (*a*)

	Concrete mix, cement and sand	*Cement products*	*Clay bricks, tiles etc.*	*Timber, board and joinery*	*Steel products*	*Other metal products*
Value weight (%)	*5.73%*	*8.10%*	*12.85%*	*36.16%*	*5.86%*	*7.20%*
1970–71 . . .	113.4	121.8	118.0	118.5	115.0	112.4
1971–72 . . .	121.2	132.0	124.5	124.8	127.9	118.5
1972–73 . . .	127.0	139.9	130.7	137.0	136.8	124.9
1973–74 . . .	137.5	154.3	146.8	169.1	153.8	146.3
1974–75 . . .	165.7	193.1	180.3	203.5	192.1	170.3

PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING
GROUP INDEX NUMBERS—WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES—*continued*

(*Base of each Index: Year* 1966–67 = 100.0) (*a*)

	Plumbing fixtures	*Electrical installation materials*	*Installed appliances*	*Plaster and plaster products*	*Miscellaneous materials*	*All groups*
Value weight (%)	*3.74%*	*1.63%*	*5.13%*	*5.64%*	*7.96%*	*100.00%*
1970–71	113.6	115.0	103.8	109.4	111.0	115.7
1971–72	122.6	120.2	107.4	116.9	116.4	122.7
1972–73	129.6	126.2	108.3	118.7	124.9	131.1
1973–74	143.2	146.4	117.7	122.2	135.0	151.3
1974–75	174.5	168.3	146.4	147.8	161.5	183.4

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING
ALL GROUPS INDEX NUMBERS—SIX STATE CAPITAL CITIES

(*Base of each Index: Year* 1966–67 = 100.0) (*a*)

NOTE. The separate city indexes measure price movements within each city individually. They do not compare price levels as between cities.

Period	*State capital cities*						*Weighted average of six State capital cities*
	Sydney	*Melbourne*	*Brisbane*	*Adelaide*	*Perth*	*Hobart*	
1970–71	119.8	112.3	115.2	116.7	113.9	114.3	115.7
1971–72	126.1	118.9	124.8	124.8	121.1	120.7	122.7
1972–73	135.6	126.5	133.8	134.8	126.9	130.8	131.1
1973–74	158.0	147.8	152.2	157.2	141.8	145.5	151.3
1974–75	189.4	178.4	187.0	195.4	172.4	179.1	183.4

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off index numbers to the nearest whole number.

Price Index of Materials used in Manufacturing Industry

Introduction

This index was introduced in July 1975 and relates to materials (including fuels) used in manufacturing industry. It completes the presentation of a set of price indexes which replaces the Wholesale Price (Basic Materials and Foodstuffs) Index, publication of which was discontinued in December 1970.

Scope and composition

The composition of the index is based on materials used by establishments classified to Division C, Manufacturing, of the Australian Standard Industrial Classification (ASIC). The index is on a *net basis;* that is, it relates in concept only to those materials which are used by establishments within the Manufacturing Division in Australia and which have been produced by establishments outside that Division. Such outside establishments are either Australian establishments classified to other Divisions of Australian industry (e.g. Mining or Agriculture) or are overseas establishments (including overseas manufacturing establishments).

Materials purchased by establishments classified to the Australian Manufacturing Division from other establishments in that Division are outside the scope of the index and are excluded, but the same materials when purchased from overseas are included. Thus, for example, prices of Australian produced cotton fabric (a product of establishments classified to the Manufacturing Division) are excluded from the index whereas prices of imported cotton fabric are included. It follows that the weight attributed to cotton fabric in the index only relates to cotton fabric of imported origin. A material which undergoes transformation at a number of stages during manufacturing will, at each stage, be an input to particular manufacturing industries. However, in keeping with the scope and *net* basis of this index, the material is only priced at the stage it first enters manufacturing. An example is the usage of copper concentrates. Prices of copper concentrates are reflected in the index; however, prices of copper ingots used in the manufacture of copper pipes, or of copper pipes used in the manufacture of plumbing items, are not included in the index. In other words, the pricing and weights for the index reflect *usage of materials at the point of entry to the Manufacturing Division.*

Base period and method of calculation

The reference base of the index is the year 1968–69 = 100.0. The index is a fixed-weights index and is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Derivation of items and weights

The items included in the index were selected on the basis of values of materials used, in 1971–72, by establishments classified to the Manufacturing Division of ASIC. Only materials originating from outside the Manufacturing Division (that is, materials which are *net inputs* to manufacturing) were selected. The selection was made from data reported in the 1971–72 Census of Manufacturing Establishments, and in 1971–72 import statistics.

The selected items were allocated weights in accordance with estimated manufacturing usage in the year 1971–72. Many of the selected items carry not only the weight of directly priced materials but also the weight of unpriced materials whose prices are considered to move similarly to those of directly priced materials.

Weighting patterns and classifications

The selected items have been published into broad *index groups* using two different classifications. Index numbers are published for each of the groups derived in this way. The classifications used for this purpose are:

(i) Australian Standard Industrial Classification (ASIC), and
(ii) Standard International Trade Classification (SITC).

In effect, the index numbers for index groups based on ASIC are on an *industry of origin basis* and in addition, the distinction between home produced and imported materials is made. Index numbers for index groups based on SITC are on a *commodity basis*. The percentage contributions for each of the index items, groups and categories are based on estimated usage in 1971–72, valued at the relevant prices applying in the reference base year 1968–69, and given on pages 261–4.

Prices

Prices incorporated in the index are obtained from representative suppliers and users in all States. Prices of home-produced items are generally obtained from principal users (that is manufacturers) but in some cases from major suppliers (producers or wholesalers). Prices of imported items are obtained from suppliers (importers) and users (manufacturers). In concept, pricing for the index is at the point at which the materials physically enter the manufacturing sector. Therefore, as far as possible, prices are on a *delivered into store* basis. Price series relate to *goods of fixed specifications* with the aim of incorporating in the index price changes for representative materials of *constant quality*.

Prices collected are mainly *monthly average prices* rather than prices relating to the mid-point of the month. This is because there is a high frequency of price change for many of the materials included in the index, and prices as at one point of time within a month are not always representative of average prices for the month. Price series for electricity and gas are based on the average realised cost per unit of actual monthly sales to 'industrial' users by selected major suppliers and are therefore subject to fluctuations due to changing usage patterns. In general, prices recorded in the index for a given month refer to materials delivered to manufacturers in that month.

Prices of transferred goods

Transfers which do not take place on the open market present problems in the measurement of price change. An example is where a vertically-integrated enterprise extracts a mineral (mining activity) and also processes it (manufacturing activity). Since the material is transferred from one part of the enterprise to another there is usually no transaction price. In such instances various methods of imputing movements in market prices have been adopted. Depending on circumstances and the availability of data, these methods include using movements in *opportunity cost* (based, for example, on the price of the material in an established market) or movement in cost (based on expenses actually incurred in obtaining the material). Imputations of this kind enter partly into price series for items such as iron ore, bauxite, nickel and coal.

Seasonal items

In the case of seasonally produced items such as fruit and vegetables where deliveries do not occur over the whole year, the previous season's prices are in general repeated for the months outside the selling season until the subsequent season's prices become operative.

Index numbers

The index has been compiled for each month from July 1968 and for financial years from 1968–69 on the reference base year 1968–69. Index numbers for financial years are simple averages of the relevant monthly index numbers. Monthly index numbers will be found in the publication *Price Index of Materials Used in Manufacturing* (9.13) of 4 July 1975 and the supplement to this publication and subsequent issues.

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY: GROUP INDEX NUMBERS BASED ON INDUSTRY OF ORIGIN

(*Base of each index: Year* 1968–69 = 100.0) (*a*)

	Imported materials				*Home produced materials*					
	Agriculture	*Mining*	*Manufacturing*	*Total imported materials*	*Agriculture*	*Forestry and fishing*	*Mining*	*Electricity*	*Total home produced materials*	*All groups*
Value weight (%)	*1.92%*	*4.17%*	*21.07%*	*27.16%*	*47.04%*	*1.12%*	*18.92%*	*5.76%*	*72.84%*	*100.00%*
1968–69	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1969–70	104.5	96.2	101.0	100.5	101.6	103.5	108.8	99.7	103.4	102.6
1970–71	101.8	105.3	102.0	102.5	99.3	110.1	98.7	99.4	99.3	100.1
1971–72	95.5	112.0	103.4	104.1	103.5	120.9	97.1	101.7	102.0	102.6
1972–73	105.2	109.1	104.4	105.2	125.3	131.0	100.4	103.7	117.2	113.9
1973–74	130.6	196.3	113.1	127.1	147.9	157.3	119.0	109.9	137.6	134.7
1974–75	149.3	357.8	149.5	181.5	132.2	187.8	129.0	124.6	131.6	145.1

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY: GROUP INDEX NUMBERS BASED ON STANDARD INTERNATIONAL TRADE CLASSIFICATION

(*Base of each index: Year* 1968–69 = 100.0) (*a*)

	Manufactured materials (imported)			*Other materials (imported and home produced)*			
	Chemicals	*Metal manufactures, components for transport equipment and machinery*	*Other manufactured materials*	*Food, live animals and tobacco*	*Crude materials (excl. fuels)*	*Electricity, gas and fuels*	*All groups*
Value weight (%)	*6.67%*	*5.21%*	*5.76%*	*45.87%*	*20.66%*	*15.83%*	*100.00%*
1968–69	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1969–70	98.1	103.9	99.4	102.4	108.2	98.4	102.6
1970–71	97.2	108.4	98.2	100.9	99.9	97.3	100.1
1971–72	95.6	114.9	97.8	104.7	100.9	99.1	102.6
1972–73	91.4	119.3	97.6	122.9	116.0	99.1	113.9
1973–74	96.3	118.6	106.1	145.9	140.7	126.2	134.7
1974–75	141.9	148.7	137.4	132.4	149.3	179.5	145.1

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY
PERCENTAGE CONTRIBUTIONS TO THE INDEX AGGREGATE (*a*)
GROUPS BASED ON INDUSTRY OF ORIGIN

	Percentage contribution of—	
Category, group and item	*Item to All groups*	*Group to All groups*
IMPORTED MATERIALS—		
Agriculture		*1.92*
Coffee beans	0.33	
Cocoa beans	0.26	
Tobacco	0.62	
Natural rubber	0.53	
Jute	0.10	
Sisal hemp	0.08	
Mining		*4.17*
Crude petroleum	2.71	
Phosphate rock	0.90	
Sulphur	0.33	
Asbestos	0.23	
Manufacturing		*21.07*
Cotton fabric	1.40	
Synthetic fabric	1.55	
Synthetic yarn	0.94	
Synthetic fibre	0.42	
Hessian	0.23	
Chemical elements and compounds	2.65	
Plastic materials and resins	2.04	
Dyeing, tanning and colouring materials	0.67	
Medicinal and pharmaceutical materials	0.17	
Essential oils and cleansers	0.26	
Other chemicals	0.88	
Synthetic rubber	0.30	
Fuel oil	0.59	
Unassembled cars, trucks and tractors	2.98	
Automotive parts	0.95	
Bearings	0.34	
Diesel engines	0.28	
Electric motors	0.19	
Float glass	0.17	
Tyres	0.12	
Softwood	0.93	
Hardwood	0.18	
Printing papers	1.35	
Woodpulp	0.66	
Iron and steel plates and pipes	0.36	
Iron and steel coils	0.11	
Vegetable oils	0.35	

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY PERCENTAGE CONTRIBUTIONS TO THE INDEX AGGREGATE (*a*) GROUPS BASED ON INDUSTRY OF ORIGIN—*continued*

Category, group and item	*Percentage contribution of—* *Item to All groups*	*Group to All groups*
HOME PRODUCED MATERIALS—		
Agriculture		*47.04*
Cattle and calves	15.58	
Lambs	2.69	
Sheep	2.74	
Pigs	2.39	
Chickens	1.80	
Milk	7.86	
Wool	1.79	
Eggs	0.14	
Wheat	2.93	
Barley	0.74	
Rice	0.45	
Sorghum	0.21	
Oats	0.17	
Maize	0.12	
Grapes	0.56	
Peaches	0.24	
Pineapples	0.21	
Pears	0.16	
Oranges	0.13	
Other fruit	0.27	
Peas	0.21	
Potatoes	0.15	
Beans	0.13	
Other vegetables	0.14	
Hops	0.06	
Sugar cane	3.58	
Oilseeds	0.32	
Cotton	0.28	
Peanuts	0.15	
Tobacco	0.84	
Forestry and Fishing		*1.12*
Hardwood	0.43	
Softwood	0.04	
Plantation pine	0.19	
Wood for pulp	0.30	
Fish	0.16	
Mining		*18.92*
Iron ore	2.59	
Copper in concentrates	2.85	
Nickel in concentrates	0.48	
Silver-lead in concentrates	1.51	
Zinc in concentrates	0.65	
Bauxite	0.92	
Tin in concentrates	0.38	
Gold	0.46	
Crude petroleum	4.07	
Coal and briquettes	1.60	
Gas	1.10	
Gravel	0.86	
Sand	0.54	
Clay	0.43	
Limestone	0.32	
Gypsum	0.16	
Electricity		*5.76*
Electricity	5.76	
	100.0	**100.0**

(*a*) The percentage contributions to the index aggregate are based on estimated usage in 1971–72 valued at relevant prices in 1968–69.

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY PERCENTAGE CONTRIBUTIONS TO THE INDEX AGGREGATE (*a*) GROUPS BASED ON STANDARD INTERNATIONAL TRADE CLASSIFICATION (S.T.I.C.)

Group and item	*Percentage contribution of—* *Item to All groups*	*Group to All groups*
MANUFACTURED MATERIALS (IMPORTED) (b)—		
Chemicals		*6.67*
Chemical elements and compounds	2.65	
Dyeing, tanning and colouring materials	0.67	
Medicinal and pharmaceutical materials	0.17	
Essential oils and cleansers	0.26	
Plastic materials and resins	2.04	
Other chemicals	8.88	
Metal manufactures, components for transport equipment and machinery		*5.21*
Iron and steel plates and pipes	0.36	
Iron and steel coils	0.11	
Bearings	0.34	
Diesel engines	0.28	
Electric motors	0.19	
Unassembled cars, trucks and tractors	2.98	
Automotive parts	0.95	
Other manufactured materials		*5.76*
Printing papers	1.35	
Cotton fabric	1.40	
Synthetic fabric	1.55	
Synthetic yarn	0.94	
Hessian	0.23	
Float glass	0.17	
Tyres	0.12	
OTHER MATERIALS (IMPORTED AND HOME PRODUCED) (c)—		
Food, live animals and tobacco		*45.87*
Cattle and calves	15.58	
Lambs	2.69	
Sheep	2.74	
Pigs	2.39	
Chickens	1.80	
Milk	7.86	
Eggs	0.14	
Fish	0.16	
Wheat	2.93	
Barley	0.74	
Rice	0.45	
Sorghum	0.21	
Oats	0.17	
Maize	0.12	
Grapes	0.56	
Peaches	0.24	
Pineapples	0.21	
Pears	0.16	
Oranges	0.13	
Other fruit	0.27	
Peas	0.21	
Potatoes	0.15	
Beans	0.13	
Other vegetables	0.14	
Hops	0.06	
Sugar cane	3.58	
Coffee beans	0.33	
Cocoa beans	0.26	
Tobacco	1.46	

PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY PERCENTAGE CONTRIBUTIONS TO THE INDEX AGGREGATE (*a*) GROUPS BASED ON STANDARD INTERNATIONAL TRADE CLASSIFICATION (S.I.T.C.)—*continued*

Group and item	*Percentage contribution of—* *Item to All groups*	*Percentage contribution of—* *Group to All groups*
Crude materials (excluding fuels)		*20.66*
Peanuts	0.15	
Oilseeds	0.32	
Natural rubber	0.53	
Synthetic rubber	0.30	
Hardwood	0.61	
Softwood	0.97	
Plantation pine	0.19	
Wood for pulp	0.30	
Woodpulp	0.66	
Wool	1.79	
Jute	0.10	
Sisal hemp	0.08	
Cotton	0.28	
Synthetic fibre	0.42	
Gravel	0.86	
Sand	0.54	
Clay	0.43	
Limestone	0.32	
Gypsum	0.16	
Asbestos	0.23	
Phosphate rock	0.90	
Sulphur	0.33	
Iron ore	2.59	
Copper in concentrates	2.85	
Nickel in concentrates	0.48	
Silver-lead in concentrates	1.51	
Zinc in concentrates	0.65	
Bauxite	0.92	
Tin in concentrates	0.38	
Gold	0.46	
Vegetable oils	0.35	
Electricity, gas and fuels		*15.83*
Crude petroleum	6.78	
Fuel oil	0.59	
Electricity	5.76	
Gas	1.10	
Coal and briquettes	1.60	
	100.00	**100.00**

(*a*) The percentage contributions to the index aggregate are based on estimated usage in 1971-72 valued at relevant prices in 1968-69. (*b*) Excluding the manufactured imported crude materials listed in footnote (*c*). (*c*) Includes imported fuel oil and the following imported crude materials: synthetic rubber, hardwood, softwood, wood pulp, synthetic fibre, vegetable oils.

Price Index of Metallic Materials used in the Manufacture of Fabricated Metal Products

This index was introduced in December 1972. The index includes important metallic materials selected and combined in accordance with a weighting pattern reflecting value of usage as reported at the 1968–69 Census of Manufacturing Establishments for establishments classified to the Fabricated Metal Products Sub-division of Manufacturing Industry (Australian Standard Industrial Classification Sub-division 31).

The reference base of the index is the year 1968–69 = 100.0. The index is a fixed weights index and is calculated by the method know as 'the weighted arithmetic mean of price relatives'.

Prices for each of the items relate to representative goods of fixed specification collected from a selection of representative sources. The price series used are obtained monthly, by mail collection, from major Australian manufacturers of the relevant materials. In the main prices are collected as at the mid-point of each month.

The index has been compiled for each month from July 1968, and for financial years from 1968–69. Index numbers for financial years are simple averages of the relevant monthly index numbers.

Further information concerning the method of compiling the index, as well as more detailed group index numbers and the weighting pattern of the index, will be found in the publication *Price Indexes of Metallic Materials* (*9.10*) of 14 December 1972, as well as in *Labour Report* No. 58, 1973, and in Year Book No. 60, 1974.

PRICE INDEX OF METALLIC MATERIALS USED IN THE MANUFACTURE OF FABRICATED METAL PRODUCTS—GROUP INDEX NUMBERS

(*Base of each Index: Year* 1968–69 = 100.0) (*a*)

	Iron and steel	*Aluminium*	*Copper and brass*	*Other metallic materials*	*All groups*
Value weight (*%*)	*83.2%*	*8.9%*	*5.7%*	*2.2%*	*100.0%*
1970–71	106.7	104.5	106.5	90.9	106.2
1971–72	116.2	106.8	106.2	83.6	114.1
1972–73	122.6	109.2	106.6	98.7	120.0
1973–74	131.7	118.2	138.1	151.3	131.3
1974–75	161.1	141.9	131.1	192.4	158.4

(*a*) Figures are published to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

Price Indexes of Copper Materials used in the Manufacture of Electrical Equipment

This special purpose measure was introduced in December 1972. Prices for each item included in the index relate to representative goods of fixed specification and are collected each month from major Australian manufacturers of the relevant materials. The index has been compiled for each month since July 1968.

A description of this index is given in *Labour Report* No. 57, 1972. Index numbers are shown in the monthly publication *Price Indexes of Metallic Materials* (*9.10*).

PRICE INDEXES OF COPPER MATERIALS USED IN THE MANUFACTURE OF ELECTRICAL EQUIPMENT INDEX NUMBERS FOR SELECTED ACTIVITIES

(*Base of each Index: Year* 1968–69 = 100.0) (*a*)

	Copper materials used in the manufacture of—				
	Electric motors and motor control equipment	*High voltage and low voltage switchgear*	*Distribution transformers*	*Power transformers*	*General transformers*
1970–71	104.0	105.7	101.3	100.3	103.0
1971–72	104.8	104.9	101.3	95.2	104.0
1972–73	110.4	111.2	105.7	98.3	109.4
1973–74	136.0	148.0	130.1	128.0	137.0
1974–75	133.1	137.1	122.4	116.3	128.9

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index members to the nearest whole number.

Price Index of Electrical Installation Materials

This special purpose index was introduced in 1964, and index numbers were published at quarterly intervals from August 1959 to February 1969, when monthly publication commenced. In addition to its use in connection with the Bureau's constant price estimates in the national accounting field, the index has a direct value as a measure of changes in aggregate cost of materials used in an important part of the building industry (other than house building).

A description of this index is given in *Labour Report* No. 56, 1971 and in Year Book No. 58, 1972, pages 239–40. Index numbers are published monthly in *Price Index of Electrical Installation Materials* (9.5).

PRICE INDEX OF ELECTRICAL INSTALLATIONS MATERIALS
GROUP INDEX NUMBERS

(*Base of each Index: Year* 1959–60 = 100.0) (*a*)

	Conductors	*Conduit and accessories*	*Switchboard and switch-gear material*	*All groups*
Value weight (%)	*40%*	*25%*	*35%*	*100%*
1970–71	128.4	112.8	129.2	124.8
1971–72	127.6	120.9	137.7	129.1
1972–73	133.5	126.8	144.2	135.5
1973–74	165.1	138.5	156.6	155.5
1974–75	168.2	169.6	192.3	177.0

(*a*) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

Melbourne Wholesale Price Index

An index of Melbourne wholesale prices was first compiled in 1912 and ceased being published in 1961. It related chiefly to basic material and foods weighted in accordance with consumption in the years immediately preceding that year. Neither the list of items nor the weighting was varied, except for some changes in the building materials group in 1949. The series has some historical significance as a measure of changes, since the year 1861.

Prices of its component items are combined in the proportions in which they were in common use about the year 1910. A description of the index and a list of the commodities included in it were published in *Labour Report* No. 38, 1949, pages 43–5. Index numbers up to the year 1961 were published in Year Book No. 48, 1962.

Wholesale Price (Basic Materials and Foodstuffs) Index

General publication of this index was discontinued with the issue of index numbers for the month of December 1970. Index numbers up to that period may be found in the mimeographed bulletin *Wholesale Price* (*Basic Materials and Foodstuffs*) *Index* (9.4) or in *Labour Report* No. 55, 1970.

The index related to commodities priced in their primary or basic form wherever possible and as nearly as might have been at the point where they first made effective impact on the local price structure. With a few exceptions, prices were from Melbourne sources. The weights were based on estimates of the average annual consumption of the commodities in Australia during the period 1928–29 to 1934–35 inclusive.

A list of the commodities and other information concerning the Wholesale Price (Basic Materials and Foodstuffs) Index is given in *Labour Report* No. 53, 1967, pages 38–41.

EXPORT PRICE INDEXES

An annual index of export prices has been published by the Bureau since its inception. Brief descriptions of indexes issued between 1901 and 1962 (that is, prior to the introduction of the current Export Price Index) are shown in Year Book No. 55, 1969, pages 256–7.

The current Export Price Index

The current Export Price Index was first published in October 1962, but index numbers were compiled back to July 1959. The reference base of this index is: year 1959–60 = 100.0. Index numbers from July 1969 have been compiled on an interim basis which incorporates a re-weighting of the items contained in the original index, and the inclusion of some additional items. This interim basis was introduced pending completion of a comprehensive review and re-basing of the index as a whole.

The Export Price Index is a fixed-weights index, and its purpose (as was that of the previous fixed-weights index) is to provide comparisons monthly, over a limited number of years, of the level of export prices of the selected items, making no allowance for variations in quantities exported. The index numbers are thus measures of price change only. The price series used in the index relate to specified standards for each commodity and in most cases are combinations of prices for a number of representative grades, types, etc.

The index is calculated by the method known as 'the weighted arithmetic mean of price relatives'.

Index numbers for each of the groups and 'All groups' are shown in the following table. The yearly index numbers are simple averages of the twelve monthly index numbers in each year.

Further information concerning the compiling of the index, as well as more detailed group index numbers, will be found in the bulletin *Export Price Index* (9.2) of October 1962, and in Year Book No. 60, 1974, pages 258–60.

EXPORT PRICE INDEX NUMBERS

(*Base of each Index: Year* 1959–60 = 100.0)

Period	*Wool*	*Meats*	*Dairy produce*	*Cereals*	*Dried and canned fruits*	*Sugar*	*Hides and tallow*	*Metals and coal (a)*	*Gold*	*All groups*
1970–71	67	152	88	100	102	113	94	139	109	101
1971–72	72	147	135	99	103	127	96	138	126	104
1972–73	179	178	119	102	106	136	139	142	180	134
1973–74	172	201	109	184	152	176	161	196	289	160
1974–75	121	132	127	256	176	378	141	263	391	181

(*a*) Comprises coal, iron and steel, copper, zinc, lead and silver. Does not include iron ore, bauxite, alumina and mineral sands, which, however, have been included in the 'All groups' index from July 1969.

Link between current and previous indexes

In order to show approximate movements in export prices over a long period, the 'All groups' indexes of the successive series have been linked together at the earliest year for which each of the indexes was compiled. The table below shows this linked series and a long-term price index for wool which is the most important single component in the movement of the 'All groups' index.

EXPORT PRICE INDEX NUMBERS—LINKED SERIES 1936-37 TO 1972-73

(*Base of each Index: Year* 1959–60 = 100)

Period	*Wool*	*All groups*
1936–37	29	30
1937–38	23	27
1938–39	19	22
1939–40	23	26
1940–41	24	28
1941–42	24	28
1942–43	28	30
1943–44	28	31
1944–45	28	34
1945–46	28	39
1946–47	41	54
1947–48	68	75
1948–49	86	88
1949–50	111	101
1950–51	235	173
1951–52	133	125
1952–53	145	128
1953–54	145	125
1954–55	127	114
1955–56	109	105
1956–57	136	117
1957–58	111	102
1958–59	85	90
1959–60	**100**	**100**
1960–61	92	95
1961–62	97	96
1962–63	104	101
1963–64	120	114
1964–65	102	105
1965–66	107	107
1966–67	103	105
1967–68	95	100
1968–69	99	102
1969–70(*a*)	87	103
1970–71	67	101
1971–72	72	104
1972–73	179	134
1973–74	172	160
1974–75	121	181

(*a*) Interim series linked as at June 1969.

WAGES, EARNINGS AND HOURS

Arbitration and Wages Boards Acts and associated legislation

Summaries of the operation of Federal and State Acts regulating rates of pay, hours and other conditions of employment were first compiled for the year 1913 and particulars for this and subsequent years have appeared in the annual *Labour Report*. This report summarises the position up to the end of 1975 or in some cases early 1976.

Federal industrial legislation and tribunals

Under paragraph (xxxv) of Section 51 of the Commonwealth Constitution, the Commonwealth Parliament is empowered to make laws with respect to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. In 1904 the Conciliation and Arbitration Act was passed by the Commonwealth Parliament and this Act with amendments has been in operation since then.

In addition to this 'conciliation and arbitration' power the Commonwealth Parliament can legislate concerning conditions of employment for its own employees and for employees in Australian Territories. Under the interstate and overseas trade and commerce power (paragraph (i) of section 51 of the Constitution) the Parliament can legislate directly in respect of industries such as the maritime and stevedoring industries. In times of national emergency the defence power of the Constitution (paragraph (vi) of section 51) enables Parliament to have direct control over all industry.

The Conciliation and Arbitration Act provides for the separation of the judicial functions from the conciliation functions and for the establishment of the Australian Industrial Court to deal with judicial matters and the Australian Conciliation and Arbitration Commission to deal with the functions of conciliation and arbitration under the Act. A summary of the main provisions of the Act operative to the end of 1975 is given in the following paragraphs.

The Australian Industrial Court is a superior court of record comprising a Chief Judge and not more than nine other Judges. The Court carries out the judicial functions associated with the settlement of disputes such as determining questions of law referred by the Commission or the

Registrar, hearing complaints against employers for dismissing employees because of union activities or arbitration work, interpreting awards, determining eligibility for membership of an organisation, determining questions relating to rules of an organisation, enquiring into allegations or irregularities in the conduct of elections conducted by organisations, and hearing complaints of breaches of awards and ordering compliance with awards and orders of the Commission. In certain circumstances the jurisdiction of the Court is exercised by a bench of not less than three Judges—in other cases by a single Judge.

The Australian Conciliation and Arbitration Commission consists of a President, Deputy Presidents and Commissioners. The President is required to have qualifications for judicial appointment. The other Presidential Members must have similar qualifications; or must have had experience at a high level in industry, commerce, industrial relations or the service of a government or government authority; or must have obtained a degree or similar qualification in law, economics, industrial relations or some other relevant field of study. Members of the Commission are appointed by the Commonwealth Government and may hold office until 65 years of age.

The Commission carries out its functions of conciliation and arbitration through panels or task forces. The President assigns an industry or a group of industries to a panel consisting of a Presidential Member and one or more Commissioners.

When the Commission receives notification of a dispute, or of one which is likely to occur, a member of the appropriate panel takes steps to prevent or settle the dispute. Negotiation may take place between the parties outside the Commission or under the supervision of the Commission. If the parties reach agreement they may make a memorandum of their agreement and have it certified by the Commission. Some issues in dispute may be resolved by agreement and others determined by arbitration by the Commission.

Certain matters cannot be determined by a single member of the Commission. Those matters which must be determined by a Full Bench of the Commission, consisting of a number of Presidential Members and Commissioners, include standard hours, national wage cases, the minimum wage, equal pay principles, annual leave and long service leave. Full Benches of the Commission also hear appeals from decisions of single members and deal with references from single members. Appeals and references from the Public Service Arbitrator or Deputy Arbitrators are heard by Full Benches. When matters relating to appeals or references under both or either of the Conciliation and Arbitration Act and the Public Service Arbitration Act are being heard, the Commission may sit in joint session (i.e. comprised of persons constituting the Commission in the separate matters) to take evidence and hear arguments. In any proceedings before a Full Bench, the Minister may, on behalf of the Commonwealth Government, intervene in the public interest. Others may apply to the Commission for leave to intervene which may be granted if the Commission thinks that the person or organisation should be heard.

The Act provides that a member of the Commission assigned by the President should handle industrial matters in the maritime industries and the stevedoring industry, other than those matters that must be dealt with by a Full Bench.

The jurisdiction of the Commission is limited to conciliation and arbitration of interstate industrial disputes between employers and employees. The employees must be engaged in employment that is 'industrial' in character. It has been held, for example, that school teachers, nurses, police and fire-fighters employed by government authorities are not engaged in 'industrial' employment. However, in the case of employees in the Northern Territory and the Australian Capital Territory the Commission has jurisdiction to settle industrial disputes whether or not the employees are engaged in an *industry* in the constitutional sense of the word.

The Conciliation and Arbitration Act provides that where a State law, or an order, award, decision or determination of a State industrial tribunal is inconsistent with or deals with a matter dealt with in an award of the Commission, the latter shall prevail and the former, to the extent of the inconsistency or in relation to the matter dealt with, shall be invalid.

Wages, hours of work and other conditions of employment of Commonwealth Government employees are regulated by the Australian Public Service Arbitrator and the Deputy Public Service Arbitrators under powers conferred by the *Public Service Arbitration Act* 1920–1973. Appeals and references from the Arbitrator or the Deputy Arbitrators may be made to the Australian Conciliation and Arbitration Commission.

The Flight Crew Officers' Industrial Tribunal is empowered to prevent or settle industrial disputes involving pilots, navigators and flight engineers of aircraft. The tribunal was established in February 1968 under provisions of the Conciliation and Arbitration Act.

The Coal Industry Tribunal was established under the *Australian Coal Industry Act* 1946 and the New South Wales Coal Industry Act, 1946 and is empowered to consider interstate disputes and New South Wales disputes in the coal mining industry.

State industrial tribunals

New South Wales. The principal authority is the Industrial Commission of New South Wales, which consists of a President and not more than seven other Judges. Subsidiary tribunals are Conciliation Commissioners and Conciliation Committees constituted for particular industries. Each Conciliation Committee consists of a Conciliation Commissioner as chairman and an equal number of representatives of employers and employees. Special Commissioners may be appointed. Wages, salaries and conditions of employment of State Government employees are regulated by determinations made by, or industrial agreements registered with, the Public Service Board of New South Wales.

Victoria. The authorities are separate Wages Boards for the occupations and industries covered, each consisting of a chairman and an equal number of representatives of employers and employees, and the Industrial Appeals Court presided over by a judge of the County Court. The conditions of employment of State Government employees are regulated by determinations or regulations of the Public Service Board, the Police Service Board and the Teachers Tribunal.

Queensland. The authorities consist of the Industrial Court of Queensland, which deals with the legal aspects of the system, and the Industrial Conciliation and Arbitration Commission of Queensland, which deals with conciliation and arbitration functions. The President of the Industrial Court is a Judge of the Supreme Court of Queensland. Not more than five Commissioners may be appointed to the Commission. The Commission is constituted by a Commissioner sitting alone or in the case of a Full Bench of the Commission by at least three Commissioners. The conditions of employment of State Government employees are regulated by awards, etc. of the Commission.

South Australia. The system of control consists of an Industrial Commission, an Industrial Court and Conciliation Committees. The Commission is composed of a President, two Deputy Presidents and Commissioners. The Commissioners are chairmen of Conciliation Committees consisting of an equal number of representatives of employers and employees. The Commission and Conciliation Committees make awards. The President and Deputy Presidents of the Commission are the President and Deputy Presidents, respectively, of the Industrial Court which deals with legal matters and workmen's compensation.

Rates of pay and other conditions of employment of State Government employees are determined by the Public Service Arbitrator and the Teachers Salaries Board.

Western Australia. The principal authorities comprise the Western Australian Industrial Commission consisting of seven Commissioners and the Western Australian Industrial Appeal Court consisting of three Supreme Court Judges. Awards may be made by a single Commissioner or by the Commission in Court Session consisting of three Commissioners. Appeals and references from single Commissioners are heard by the Commission in Court Session. Appeals from the Commission to the Industrial Appeal Court are limited to matters of law or jurisdiction. The Western Australian Coal Industry Tribunal, consisting of a chairman and two representatives each of employers and employees, has power to determine industrial matters in the coal mining industry. Decisions of the Tribunal may be reviewed by the Commission in Court Session. Wages and other conditions of employment of State Government employees are regulated by the Public Service Arbitrator, the Railways Classification Board and by determinations made under the Education Act, including determinations of the Government School Teachers Tribunal.

Tasmania. The authorities are Wages Boards for separate industries, comprising a Chairman (or Deputy Chairman) and an equal number of representatives of employers and employees. The Public Service Board and the Public Service Arbitrator regulate the wages and conditions of employment of State Government employees.

Incidence of industrial awards, determinations and collective agreements

A survey conducted in May 1974 showed the number and proportion of employees whose rates of pay and conditions of employment were varied in accordance with awards, determinations and collective agreements. Awards, etc. of Federal industrial arbitration authorities affected 39 per cent of employees (males 44 per cent, females 30 per cent), awards, etc. of State authorities affected 48 per cent of employees (males 41 per cent, females 62 per cent), unregistered collective agreements affected 1 per cent of employees, and 12 per cent of employees were not affected by awards, etc.

Results of this survey are published in *Incidence of industrial awards, determinations and collective agreements* (6.5) May 1974.

Rates of wage and hours of work

This section contains indexes (with base: year 1954 = 100) of minimum weekly and hourly rates of wage and standard hours of work for adult males and adult females for Australia and each State.

In the indexes there are fifteen industry groups for adult males and eight industry groups for adult females. For relevant periods these indexes replace cognate indexes (base: year 1911 = 1,000 for males and April 1914 = 1,000 for females) published in Year Books before No. 46, 1960. The current indexes are based on the occupation structure existing in 1954. Weights for each industry and each occupation were derived from two sample surveys made in that year. The first was the Survey of Awards in April 1954 which showed the number of employees covered by individual awards, determinations and collective agreements. This provided employee weights for each industry as well as a basis for the Survey of Award Occupations made in November 1954. This second survey showed the number of employees in each occupation within selected awards, etc. thereby providing occupation weights.

The industrial classification used in the current indexes, shown in the table on page 272, does not differ basically from the previous classification, the alterations being largely in the arrangement of classes. The former Pastoral, agricultural, etc. group and the domestic part of the Amusement, hotels, personal service, etc. group are excluded from the current indexes because of coverage difficulties.

The minimum wage rates and standard hours of work used in the current indexes are for representative occupations within each industry. They have been derived entirely from representative awards, determinations and collective agreements in force at the end of each month or quarter, commencing with March 1939 for adult males and March 1951 for adult females. Particulars have been available as at the end of each month for adult males from January 1957 and for adult females from July 1967. The index for adult males includes rates and hours for 3,415 award designations. However, as some of these designations are operative within more than one industry, or in more than one State, the total number of individual award occupations is 2,313. For adult females the corresponding numbers are 1,100 and 515. Using the industry and the occupation weights derived from the surveys described above, these rates and hours were combined to give weighted averages for each industry group for each State and Australia.

Because the indexes are designed to measure movements in prescribed minimum rates of 'wages' as distinct from 'salaries', those awards, etc. which relate solely or mainly to salary earners are excluded.

A more detailed description of the current indexes of minimum rates of wage and standard hours of work is given in the *Labour Report*, which also contains an extensive tabular presentation of the minimum rates of pay for adult males and females in the principal occupations in the capital city of each State. Further particulars of wage rates and index numbers will be found in mimeographed bulletins *Minimum Wage Rates*, March 1939 to June 1965, *Wage Rates Indexes*, June 1965 to June 1968 and *Wage Rates Indexes*, June 1968 to June 1972. Current figures are published in the monthly bulletins *Wage Rates and Earnings* and *Wage Rates Indexes* (*Preliminary Statement*).

Weekly wage rates—adult males

WEEKLY WAGE RATES: ADULT MALES, ALL GROUPS(*a*)

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*b*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
RATES OF WAGE ($) (*c*)							
1950 . . .	20.62	20.18	19.52	19.79	20.06	19.80	20.20
1960 . . .	36.28	34.99	35.07	34.22	35.81	35.15	35.50
1970 . . .	54.40	53.68	55.07	52.12	55.99	54.49	54.20
1974p . .	105.51	105.15	109.16	103.32	101.04	106.02	105.42
1975p . .	117.72	116.84	122.01	115.01	111.73	116.93	117.37
INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia, Year* 1954 = 100)							
1950 . . .	73.0	71.4	69.1	70.1	71.0	70.1	71.5
1960 . . .	128.5	123.9	124.2	121.2	126.8	124.5	125.7
1970 . . .	192.6	190.1	195.0	184.6	198.2	192.9	191.9
1974p . .	373.6	372.3	386.5	365.8	357.8	375.4	373.3
1975p . .	416.8	413.7	432.0	407.2	395.6	414.0	415.6

(*a*) Excludes rural industry. (*b*) As prescribed in awards, determinations and collective agreements. (*c*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia the weighted average minimum weekly rates of wage and index numbers in each industry group and for all groups (excluding rural industry) at the dates specified.

WEEKLY WAGE RATES: ADULT MALES, INDUSTRY GROUPS, AUSTRALIA

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*a*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

Industry Group	*End of December—*				
	1950	*1960*	*1970*	*1974p*	*1975p*
RATES OF WAGE(*b*) ($)					
Mining and quarrying(*c*)	25.96	41.47	60.83	122.79	145.90
Manufacturing—					
Engineering, metals, vehicles, etc.	20.17	35.02	51.88	101.34	109.74
Textiles, clothing and footwear	19.74	34.04	50.92	92.22	106.03
Food, drink and tobacco	20.14	35.22	52.98	101.45	113.71
Sawmilling, furniture, etc.	19.60	34.62	51.84	101.51	111.53
Paper, printing, etc.	21.42	37.92	57.47	107.02	119.16
Other manufacturing	19.76	34.72	52.34	101.38	112.53
All manufacturing groups	*20.08*	*35.05*	*52.36*	*101.02*	*111.21*
Building and construction	19.86	35.75	56.67	110.35	125.70
Railway services	19.58	34.65	51.32	101.94	110.18
Road and air transport	19.79	35.25	54.65	107.48	116.40
Shipping and stevedoring(*d*)	19.66	34.46	60.54	118.23	144.84
Communication	21.33	38.49	68.95	130.75	141.67
Wholesale and retail trade	20.08	35.71	53.82	105.75	117.31
Public authority (n.e.i.) and community and business services	19.21	34.81	54.11	104.09	119.62
Amusement, hotels, personal service, etc.	19.23	33.73	49.16	97.66	108.89
All industry groups(*e*)	**20.20**	**35.50**	**54.20**	**105.42**	**117.37**
INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia, Year* 1954 = 100)					
Mining and quarrying(*c*)	91.9	146.8	215.4	434.8	516.6
Manufacturing—					
Engineering, metals, vehicles, etc.	71.4	124.0	183.7	358.8	388.6
Textiles, clothing and footwear	69.9	120.5	180.3	326.5	375.4
Food, drink and tobacco	71.3	124.7	187.6	359.2	402.6
Sawmilling, furniture, etc.	69.4	122.6	183.6	359.4	394.9
Paper, printing, etc.	75.9	134.3	203.5	378.9	421.9
Other manufacturing	70.0	122.9	185.3	359.0	398.5
All manufacturing groups	*71.1*	*124.1*	*185.4*	*357.7*	*393.8*
Building and construction	70.3	126.6	200.7	390.7	445.1
Railway services	69.3	122.7	181.7	360.9	390.1
Road and air transport	70.1	124.8	193.5	380.6	412.1
Shipping and stevedoring(*d*)	69.6	122.0	214.3	418.6	512.8
Communication	75.5	136.3	244.1	463.0	501.6
Wholesale and retail trade	71.1	126.4	190.6	374.5	415.4
Public authority (n.e.i.) and community and business services	68.0	123.2	191.6	368.6	423.6
Amusement, hotels, personal service, etc.	68.1	119.4	174.1	345.8	385.5
All industry groups(*e*)	**71.5**	**125.7**	**191.9**	**373.3**	**415.6**

(*a*) As prescribed in awards, determinations and collective agreements. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. (*c*) For mining, rates of wage used are those prescribed for the principal mining centres and include lead bonuses, etc. (*d*) Includes rates of wage (and value of keep) for occupations in the coastal shipping service, other than masters, officers and engineers (*e*) Excludes rural industry.

Adult males—jurisdiction. Weighted average minimum weekly wage rates for adult males covered by *Federal awards*, etc. and for those covered by *State awards*, etc. (as defined below) are shown separately in the following table. For the purposes of the index, *Federal awards*, etc. include awards of, or collective agreements registered with, the Australian Conciliation and Arbitration Commission, and determinations of the Australian Public Service Arbitrator. *State awards, etc.* include awards or determinations of, or collective agreements registered with, State industrial tribunals, together with certain unregistered collective agreements when these are dominant in the particular industries to which they refer.

WEEKLY WAGE RATES: ADULT MALES, ALL GROUPS(*a*)

($)

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*b*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AS PRESCRIBED IN AWARDS, DETERMINATIONS AND COLLECTIVE AGREEMENTS

Jurisdiction	*End of December* 1950	1960	1970	1974p	1975p
Federal awards, etc.(*c*)	20.18	35.14	53.77	105.64	118.62
State awards, etc.(*c*)	20.23	35.88	54.65	105.19	115.87
All awards, etc.	20.20	35.50	54.20	105.42	117.37

(*a*) Excludes rural industry. (*b*) The amounts should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. For definitions *see* text above. (*c*) The wage rates for these two categories may change at any time as a result of the transfer of particular awards or occupations from one jurisdiction to another.

Weekly wage rates—adult females

The following table shows, for each State and Australia, the weighted average minimum weekly rates of wage payable to adult female workers for a full week's work and index numbers at the dates specified. This series has not been compiled for years prior to 1951.

WEEKLY WAGE RATES: ADULT FEMALES, ALL GROUPS(*a*)

WEIGHTED AVERAGE MINIMUM WEEKLY WAGE RATES(*b*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
RATES OF WAGE(*c*) ($)							
1951	17.23	17.22	16.12	17.02	16.25	16.56	17.03
1960	26.12	24.66	23.93	24.29	25.12	23.88	25.17
1970	40.68	38.65	40.60	37.51	40.02	38.17	39.68
1974p	93.06	89.97	91.95	91.22	87.65	92.47	91.49
1975p	108.97	108.70	108.87	102.80	104.88	104.85	108.12
INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia, Year* 1954 = 100)							
1951	86.6	86.5	81.0	85.5	81.6	83.2	85.6
1960	131.2	123.9	120.2	122.0	126.2	120.0	126.4
1970	204.3	194.2	203.9	188.4	201.0	191.7	199.3
1974p	467.4	451.9	461.9	458.2	440.3	464.5	459.6
1975p	547.4	546.0	546.9	516.4	526.8	526.6	543.1

(*a*) Excludes rural industry; mining and quarrying; and building and construction. (*b*) As prescribed in awards, determinations and collective agreements. (*c*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows for Australia weighted average minimum weekly rates of wage and index numbers in each of the industry groups in which the number of females employed is important, and the weighted average for all groups combined, at the dates specified.

WEEKLY WAGE RATES: ADULT FEMALES, INDUSTRY GROUPS, AUSTRALIA

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*a*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES

Industry Group	End of December—				
	1951	*1960*	*1970*	*1974p*	*1975p*
RATES OF WAGE(*b*) ($)					
Manufacturing—					
Engineering, metals, vehicles, etc.	17.09	24.98	40.24	93.31	106.86
Textiles, clothing and footwear	17.12	24.07	36.59	81.09	101.01
Food, drink and tobacco	16.58	24.63	38.22	91.36	106.47
Other manufacturing	16.88	24.80	37.79	90.60	106.92
All manufacturing groups	*16.99*	*24.46*	*37.72*	*86.67*	*104.04*
Transport and communication	17.75	26.02	44.19	100.55	112.62
Wholesale and retail trade	17.11	26.36	42.12	98.07	114.78
Public authority (n.e.i.) and community and business services	17.01	25.78	41.92	93.45	111.68
Amusement, hotels, personal service, etc.	16.68	24.50	37.97	90.28	104.27
All industry groups(*c*)	**17.03**	**25.17**	**39.68**	**91.49**	**108.12**
INDEX NUMBERS (*Base: Weighted Average Weekly Wage Rate for Australia, Year* 1954 = 100)					
Manufacturing—					
Engineering, metals, vehicles, etc.	85.9	125.5	202.1	468.7	536.8
Textiles, clothing and footwear	86.0	120.9	183.8	407.3	507.4
Food, drink and tobacco	83.3	123.7	192.0	458.9	534.8
Other manufacturing	84.8	124.6	189.8	455.1	537.1
All manufacturing groups	*85.4*	*122.9*	*189.5*	*435.4*	*522.6*
Transport and communication	89.2	130.7	222.0	505.1	565.7
Wholesale and retail trade	85.9	132.4	211.6	492.6	576.5
Public authority (n.e.i.) and community and business services	85.4	129.5	210.6	469.4	561.0
Amusement, hotels, personal service, etc.	83.8	123.1	190.7	453.5	523.8
All industry groups(*c*)	**85.6**	**126.4**	**199.3**	**459.6**	**543.1**

(*a*) As prescribed in awards, determinations and collective agreements. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. (*c*) Excludes rural industry; mining and quarrying; and building and construction.

Adult females—jurisdiction. Weighted average minimum weekly wage rates for adult females covered by *Federal awards, etc.* and for those covered by *State awards, etc.* (as defined below) are shown separately in the following table. For the purposes of this index, *Federal awards, etc.* include awards of, or collective agreements registered with, the Australian Conciliation and Arbitration Commission, and determinations of the Australian Public Service Arbitrator. *State awards, etc.* include awards or determinations of, or collective agreements registered with, State industrial tribunals, together with certain unregistered collective agreements when these are dominant in the particular industries to which they refer.

WEEKLY WAGE RATES: ADULT FEMALES, ALL GROUPS(*a*)

($)

WEIGHTED AVERAGE MINIMUM WEEKLY RATES(*b*) PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AS PRESCRIBED IN AWARDS, DETERMINATIONS AND COLLECTIVE AGREEMENTS

Jurisdiction	*End of December—* 1965	1970	1971	1974p	1975p
Federal awards, etc.(*c*)	27.79	37.91	45.47	87.62	102.51
State awards, etc.(*c*)	30.20	41.16	48.42	94.86	112.99
All awards, etc.	29.10	39.68	47.06	91.49	108.12

(*a*) Excludes rural industry; mining and quarrying; and building and construction. (*b*) The amounts should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends. For definitions *see* text above. (*c*) The wage rates for these two categories may change at any time as a result of the transfer of particular awards or occupations from one jurisdiction to another.

Standard hours of work

In the fixation of weekly wage rates most industrial tribunals prescribe the number of hours constituting a full week's work (excluding overtime) for the wage rates specified. The hours of work so prescribed form the basis of the compilation of the weighted averages and index numbers shown below. The main features of the reduction of hours to forty-four and later to forty per week are summarised in previous issues of the Year Book. Since January 1948 practically all employees in Australia have had a standard working week of forty hours or less.

Hourly wage rates

The average rates of wage in the preceding tables are based on the minimum rates prescribed for selected occupations in awards, etc. for a full week's work, excluding overtime. However, the number of hours constituting a full week's work differs in some instances between the various occupations in each State, and between the same occupations in the several States. For some purposes a better comparison may be obtained by reducing the results in the preceding paragraphs to a common basis, namely the rate of wage per hour. The particulars of weighted average minimum hourly rates of wage given in the following tables relate to all industry groups except rural industry, and shipping and stevedoring. The rural industry is not included in the index, and shipping and stevedoring has been excluded because, for some of the occupations in this group, definite particulars for the computation of average working hours and hourly rates of wage are not available.

The following table shows the weighted average minimum hourly rates of wage payable to adult male workers and index numbers of hourly rates in each State.

HOURLY WAGE RATES: ADULT MALES, ALL GROUPS(*a*)

WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
			RATES OF WAGE(*b*) (cents)				
1950	51.63	50.48	48.83	49.53	50.29	49.52	50.58
1960	90.91	87.57	87.79	85.61	89.89	88.08	88.92
1970	136.08	133.91	137.49	129.74	140.09	135.50	135.35
1974p	264.38	262.38	273.36	257.77	252.19	263.96	263.59
1975p	294.19	290.81	304.42	285.71	277.81	288.99	292.57
			INDEX NUMBERS (*Base: Weighted Average Hourly Wage Rate for Australia, Year* 1954 = 100)				
1950	73.0	71.4	69.0	70.0	71.7	70.0	71.5
1960	128.5	123.8	124.1	121.0	127.1	124.5	125.7
1970	192.3	189.3	194.3	183.4	198.0	191.5	191.3
1974p	373.7	370.8	386.4	364.3	356.5	373.1	372.6
1975p	415.8	411.0	430.3	403.8	392.7	408.5	413.5

(*a*) Excludes rural industry, and shipping and stevedoring. *See* text above. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

The following table shows the weighted average minimum hourly rates of wage payable to adult female workers and index numbers of hourly rates in each State.

HOURLY WAGE RATES: ADULT FEMALES, ALL GROUPS(*a*)

WEIGHTED AVERAGE MINIMUM HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES

End of December—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
RATES OF WAGE(*b*) (cents)							
1951	43.58	43.25	40.60	42.81	40.85	41.86	42.92
1960	66.09	61.94	60.28	61.08	63.14	60.37	63.44
1970	102.92	97.10	102.26	94.32	100.59	96.32	100.03
1974p	235.44	226.01	231.62	229.40	220.33	233.36	230.63
1975p	275.70	273.07	274.23	258.50	263.63	264.59	272.54
INDEX NUMBERS (*Base: Weighted Average Hourly Wage Rate for Australia, Year* 1954 = 100)							
1951	86.9	86.2	80.9	85.3	81.4	83.4	85.6
1960	131.7	123.5	120.1	121.7	125.8	120.3	126.4
1970	205.1	193.5	203.8	188.0	200.5	192.0	199.4
1974p	469.3	450.5	461.7	457.2	439.2	465.1	459.7
1975p	549.5	544.3	546.6	515.2	525.5	527.4	543.2

(*a*) Excludes rural industry; mining and quarrying; and building and construction. (*b*) The amounts shown should not be regarded as actual current averages, but as an index expressed in money terms, indicative of trends.

Weighted average standard weekly hours of work

The 40-hour week has operated in Australia generally from 1 January 1948. However, as stated on page 275, the number of hours constituting a full week's work (excluding overtime) differs between occupations and/or between States. The weighted average standard hours of work (excluding overtime) prescribed in awards, determinations and collective agreements for a full working week, in respect of adult male workers in all industry groups except rural industry, and shipping and stevedoring, at 31 December 1975, were: New South Wales, 39.77; Victoria, 39.96; Queensland, 39.88; South Australia, 39.95; Western Australia, 39.83; Tasmania, 39.91; Australia, 39.86. Corresponding figures for adult female workers at 31 December 1975 were: New South Wales, 39.53; Victoria, 39.81; Queensland, 39.70; South Australia, 39.77; Western Australia, 39.78; Tasmania, 39.63; Australia, 39.67.

Average Weekly Earnings

The figures in this section are derived from particulars of employment and wages and salaries recorded on payroll tax returns, from other direct collections and from estimates of the unrecorded balance. The figures relate to civilians only. In addition to salary and wage payments at award rates, the total earnings figures used in the calculation of average weekly earnings include the earnings of employees not covered by awards, overtime earnings, over-award and bonus payments, payments made in advance or retrospectively during the period, etc.

Particulars of wages and salaries paid are not available for males and females separately from the sources used for this series; average weekly earnings have therefore been calculated in terms of *male units*, i.e. total male employees plus a proportion of female employees, the proportion being derived from the estimated ratios of female to male average earnings. Different ratios of female to male average earnings, based on information from the annual surveys of weekly earnings and hours, from a sample survey carried out in November 1969 and from other sources, are used for individual States and Territories. Ratios used for the December 1975 quarter are as follows: New South Wales 65 per cent, Victoria 66, Queensland 64, South Australia 63, Western Australia 62, Tasmania 66, Northern Territory 65 and the Australian Capital Territory 62. As the number of male units used in calculating Australian average weekly earnings is the sum of the estimates for the States and Territories, a separate ratio for Australia is not used, but the weighted average of the State ratios is approximately 65 per cent. Changes in these ratios may be necessary from one quarter to the next to reflect, for example, the extension of equal pay provisions, or appreciable and sustained changes in the levels of male overtime earnings. However, small differences in these ratios have relatively little effect on the earnings figures: if the ratio is understated by one per cent, then average weekly earnings of $170 would be overstated by about 70 cents.

Annual averages for each State and Australia for the years 1966–67 to 1974–75 are shown in the table below.

AVERAGE WEEKLY EARNINGS PER EMPLOYED MALE UNIT(a)

($)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(b)*
1966–67 . .	63.30	64.10	57.30	57.30	59.40	58.50	61.90
1967–68 . .	66.70	67.80	60.30	60.60	64.10	62.00	65.50
1968–69 . .	72.30	72.40	64.50	64.80	69.00	65.70	70.40
1969–70 . .	78.50	78.40	69.40	70.30	75.70	70.90	76.30
1970–71 . .	87.30	86.40	78.00	77.20	84.90	78.50	84.80
1971–72 . .	95.90	93.60	87.00	85.30	93.70	86.80	93.00
1972–73 . .	104.30	102.50	97.00	93.00	99.00	94.40	101.50
1973–74 . .	121.00	118.40	112.60	110.60	115.50	110.20	118.00
1974–75 . .	151.90	148.30	141.80	139.80	146.00	138.90	148.20

(a) *See* explanatory notes above. (b) Includes the Northern Territory and the Australian Capital Territory.

Because of the adoption of a new definition of the labour force at June 1966 population census, there is a break in comparability between June and September quarters of 1966 in the employment series used in the calculation of average weekly earnings. For this and other reasons (in particular, the lack of precise information about the ratios of female to male earnings for the States for 1965–66 and earlier years), it is not possible to make a comparable series of State estimates for periods prior to September quarter 1966. However, in order to provide a broad indication of trends over a longer period, estimates for Australia as a whole have been calculated for the period back to September quarter 1961 by methods and on a basis that are as nearly as possible comparable with those used for the current series. Annual averages for this period are: 1961–62, $47.70; 1962–63, $49.00; 1963–64, $51.60; 1964–65, $55.50; 1965–66, $58.00.

For current statistics in this series reference should be made to the quarterly publication *Average Weekly Earnings* (6.18).

Surveys of wage rates, earnings and hours, 1960 to 1974

Since 1960 a number of statistical surveys have been undertaken by this Bureau in order to obtain information on wage rates, actual weekly earnings and hours of work in Australia. Particulars of the scope and coverage of the surveys from 1960 to 1973 were shown in earlier issues of the Year Book. Details concerning the 1974 survey are shown on pages 280–1.

Survey of wage rates and earnings, September 1960

For information on the results of this survey *see* Year Book No. 51, pages 439–42.

Survey of weekly earnings, October 1961

The results of this survey were published in Year Book No. 51, pages 442–4.

Surveys of weekly earnings and hours, October 1962 to 1971 (excluding October 1965)

Details of these surveys were published in earlier issues of the Year Book. For a summary of the results for October 1969, 1970 and 1971 *see* Year Book No. 59, pages 259–65.

Survey of weekly earnings, October 1965

A survey of weekly earnings of male employees was conducted for the last pay-period in October 1965. Results of this survey, which covered the distribution and composition of weekly earnings, were published in detail in *Labour Report* No. 52, 1965 and 1966.

Survey of weekly earnings (size distribution), May 1971

A survey of weekly earnings of adult male employees was conducted for the pay-period which included 12 May 1971. The object of the survey was to obtain estimates of the numbers and proportions of full-time adult male employees (paid for a full week) in various total weekly earnings groups, average weekly total earnings for these employees, and a dissection of average weekly total earnings into average weekly overtime earnings and average weekly ordinary time earnings. The survey was conducted by means of stratified random samples of (i) private employers subject to payroll tax (that is those, other than exempt employers, paying more than $400 a week in wages and salaries),

(ii) public hospitals, and (iii) local government authorities; and in addition a complete coverage of (iv) Commonwealth and State government departments, government authorities and semi-government bodies. Excluded were employees of private employers not subject to payroll tax; employees in rural industry and private domestic service; employees of religious, benevolent and other similar organisations exempt from payroll tax (other than public hospitals and government institutions); and waterside workers employed on a casual basis. Detailed results of the survey were published in *Labour Report* No. 56, 1971.

Surveys of weekly earnings and hours, October 1972, 1973 and 1974

Sample surveys conducted before 1972 (*see* page 277) covered most private employers subject to payroll tax (i.e. those paying more than $400 a week in wages and salaries) in the six States. The October 1972 survey included for the first time: (i) private employees in the Northern Territory and the Australian Capital Territory, (ii) employees in non-government hospitals not subject to payroll tax and (iii) employees of Australian, State and local government authorities.

Results of the 1972 survey for private employees were published in the bulletin *Survey of Weekly Earnings and Hours* (6.1) and in *Labour Report* No. 57, 1972.

Some results of the 1974 survey for total (private and government) employees are contained in the tables on pages 280–1. Further particulars, including averages for each State, separate details for private and government employees, and some details for the Territories were published in the bulletin *Earnings and Hours of Employees* (6.40). Preliminary results of the surveys are published in the bulletin *Earnings and Hours of Employees* (*Preliminary*) (6.36) as soon as returns from a large percentage of respondents have been processed.

Scope of Surveys

The estimates in the following tables are based on returns from stratified random samples of (i) most private employers subject to payroll tax (i.e. those, other than exempt employers, paying more than $400 a week in wages and salaries), (ii) non-government hospitals not subject to payroll tax and (iii) local government authorities; and from all Australian and State government departments, authorities and semi-government bodies. The estimates for *private employees* refer to persons employed by employers in categories (i) and (ii). The estimates for *government employees* refer to all other employees covered by the survey. Excluded from the survey were employees of private employers not subject to payroll tax; employees in rural industry and private domestic service; employees of religious, benevolent and other similar organisations exempt from payroll tax (other than hospitals and government authorities); and waterside workers employed on a casual basis.

Although the sample was not designed to provide estimates of the numbers of employees represented, it has been calculated that the 1974 survey was representative of approximately 2,767,000 male and 1,396,000 female wage and salary earners, comprising 1,877,000 males and 1,042,000 females in private employment and 879,000 males and 354,000 females in government employment.

As parts of the survey were conducted from samples of employers (see above) the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only samples of employers were surveyed. The extent of the detail published has been determined after considering estimated measures of sampling variability. A technical note on sampling variability is included in the bulletin *Earnings and Hours of Employees* (6.40).

Comparability of results

In addition to affecting the results of each sample survey, sampling variability also affects comparison between the results of the different surveys.

The industry classification adopted for these earnings and hours surveys from 1963 to 1973 (including the 1965 survey) was that used for the 1961 and 1966 population censuses. The industry classification used for the 1974 survey was the Australian Standard Industrial Classification (ASIC) described in the Bureau publication *Australian Standard Industrial Classification* (*Preliminary Edition*) 1969, Vol. 1. Consequently estimates by industry are not directly comparable with those obtained from earlier October surveys.

The October 1965 Survey of Weekly Earnings was a special purpose survey on a different basis from the surveys compared in this section (*see* page 277).

The allocation of employees between 'Managerial, executive, professional and higher supervisory staff' and 'All other full-time employees' (as defined) depends upon the employers' interpretation of the definitions (*see* page 279).

Results for private employees published in the bulletins (6.40) are not directly comparable with the results for private employees published in *Survey of Weekly Earnings and Hours*, October 1972 (6.1) and earlier bulletins because the earlier bulletins *excluded* details for private employees in the Northern Territory and the Australian Capital Territory and for employees in non-government hospitals not subject to payroll tax.

The estimates shown in the following tables reflect the effect of the differences—between States, between industries and between government and private employment—in (i) the amounts earned and the hours worked for the same occupations, (ii) the occupational structures within industries, (iii) the industry structure, (iv) the definitions and reporting of managerial, etc. staff and non-managerial employees (*see* definitions below), (v) the level of business activity including the incidence of overtime, etc., (vi) the incidence of incentive, piece-work and profit-sharing scheme payments, and (vii) the degree of implementation of equal pay for the sexes, etc.

Definitions

The following definitions refer to terms used in the surveys and in the tables in this section.

Employees refers to male and female employees on the payroll and who received pay for the last pay-period in October.

Private employees are employees of private employers subject to payroll tax and employees of non-government hospitals not subject to payroll tax.

Government employees are civilian employees of Australian and State government departments, authorities and semi-government bodies, and of local government authorities.

Adults includes all employees 21 years of age and over and those employees who, although under 21 years of age, are paid at the adult rate for their occupation.

Juniors refers to those employees under 21 years of age who are not paid at the adult rate for their occupation.

Full-time employees refers to those employees who ordinarily work 30 hours or more a week and who received pay for the last pay-period in October. Included are 'full-time' employees on short-time; 'full-time' employees who began or ceased work during the pay-period; and 'full-time' employees on paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period.

Part-time employees refers to employees who ordinarily work less than 30 hours a week and who received pay for the last pay-period in October. Employees on short-time who normally work 30 hours or more a week are classified as full-time employees.

For *private* employees, *Other than managerial, etc. staff* were defined to include minor supervisory employees, leading hands, clerical and office staff as well as ordinary wages employees. They exclude *managerial, executive, professional and higher supervisory staff* who, for private employees, were not further defined. For *government* employees, *managerial, executive, professional and higher supervisory staff* were generally defined as those employees (i) who were ineligible to receive payment for overtime, or (ii) who, although subject to payment for overtime, were in charge of a significant number of employees in a separate establishment (or establishments). For some occupations in government employment, such as school teachers and doctors, there is no general payment for overtime. In these cases, managerial, etc. staff were determined according to the degree of supervision exercised or in relation to the pay structure of associated administrative employees.

Weekly earnings refers to gross earnings for the last pay-period in October before taxation and other deductions have been made. It includes ordinary time earnings, overtime earnings, shift allowances, penalty rates, commission and similar payments; and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the pay-period. It includes one week's proportion of payments made other than on a weekly basis, e.g. salary paid fortnightly or monthly; paid annual or other leave taken during the pay-period; periodical payments under incentive, piecework, profit sharing schemes, etc.; commissions; annual or periodical bonuses, etc. Retrospective payments are excluded.

Overtime earnings refers to that part of gross weekly earnings (as defined above) for hours paid for in excess of award, standard or agreed hours of work. Overtime earnings were not reported for managerial, etc. staff.

Ordinary time earnings refers to that part of gross weekly earnings (as defined above) for award, standard or agreed hours of work. It includes shift allowances, penalty rates, commissions, bonuses and incentive payments, and that part of paid annual and other leave, which relates to these hours.

Weekly man-hours paid for refers to the sum of man-hours for which payment was made. It includes ordinary time hours, overtime hours, paid stand-by or reporting time; and that part of paid annual leave, paid sick leave, long service leave and paid holidays taken during the specified pay-period. For employees paid other than weekly, hours are converted to a weekly basis. For employees who began or ceased work, or were absent without pay for any reason during the specified week, only the man-hours actually paid for are included. Where agreed hours of work are less than award hours, man-hours are based on agreed hours. Hours of work were not reported for managerial, etc. staff.

Overtime hours refers to hours in excess of award, standard or agreed hours of work.

Ordinary time hours refers to award, standard or agreed hours of work. It includes man-hours of stand-by or reporting time which are part of standard hours of work, and that part of paid annual leave, paid sick leave and long service leave taken during the specified week.

In the following tables the estimates of average weekly earnings are rounded to the nearest ten cents, estimates of average weekly hours paid for are rounded to the first decimal place, and estimates of average hourly earnings are rounded to the nearest cent.

AVERAGE WEEKLY EARNINGS AND HOURS (OVERTIME AND ORDINARY TIME)(*a*), FULL-TIME EMPLOYEES OTHER THAN MANAGERIAL, ETC STAFF(*b*): INDUSTRIES AUSTRALIA, OCTOBER 1974(*c*)

Industry group	*Average weekly earnings ($)*			*Average weekly hours paid for*			*Average weekly earnings ($)*			*Average weekly hours paid for*		
	Over-time earn-ings	*Ordin-ary time earn-ings*	*Total*	*Over-time hours*	*Ordin-ary time hours*	*Total*	*Over-time earn-ings*	*Ordin-ary time earn-ings*	*Total*	*Over-time hours*	*Ordin-ary time hours*	*Total*
	ADULT MALES						JUNIOR MALES					
Manufacturing—												
Food, beverages and tobacco	21.70	120.30	142.00	4.4	38.3	42.7	8.10	72.30	80.40	2.5	38.1	40.7
Textiles; clothing and footwear	11.60	112.70	124.40	2.9	38.5	41.4	3.40	62.70	66.10	1.4	38.6	40.0
Paper, printing, etc. (*d*)	14.60	139.20	153.80	2.6	38.8	41.4	4.10	75.30	79.40	1.3	39.2	40.5
Chemical, petroleum and coal products	18.80	138.50	157.30	3.4	38.1	41.5	4.10	82.20	86.20	1.1	38.3	39.3
Metal products, machinery and equipment—												
Basic metal products	27.40	136.70	164.10	5.4	38.5	44.0	7.20	83.00	90.20	2.0	38.2	40.3
Fabricated metal products; other machinery, etc. (*e*)	20.50	124.40	145.00	4.2	38.2	42.4	6.00	70.40	76.30	2.0	38.3	40.3
Transport equipment	12.20	128.10	140.30	2.4	38.3	40.7	4.30	73.70	78.10	1.4	38.3	39.6
Total	*19.40*	*128.20*	*147.60*	*3.9*	*38.3*	*42.2*	*5.80*	*73.70*	*79.50*	*1.9*	*38.3*	*40.1*
Other (*f*)	18.80	119.00	137.80	4.0	38.4	42.4	4.40	65.80	70.20	1.6	38.5	40.1
Total manufacturing	*18.90*	*126.10*	*145.00*	*3.8*	*38.3*	*42.2*	*5.50*	*72.10*	*77.60*	*1.8*	*38.4*	*40.2*
Non-manufacturing—												
Mining	39.70	146.70	186.30	7.2	35.2	42.4	13.30	88.60	101.90	3.7	36.3	39.9
Electricity, gas and water	8.90	142.80	151.70	1.6	38.5	40.1	1.90	84.30	86.20	0.5	38.3	38.9
Construction	19.80	128.80	148.50	3.7	38.2	41.9	3.10	76.00	79.20	1.0	38.9	39.9
Wholesale trade	10.50	122.40	132.90	2.2	38.6	40.8	3.70	68.80	72.50	1.2	38.9	40.2
Retail trade	9.00	117.00	126.00	2.0	39.5	41.4	4.00	65.50	69.50	1.5	39.4	40.9
Transport and storage; communication	20.50	142.00	162.50	3.7	38.3	42.1	6.60	82.50	89.10	2.1	38.3	40.3
Finance, business services (*g*)	4.30	134.20	138.50	0.9	38.4	39.3	1.30	77.00	78.30	0.4	38.6	39.0
Public administration, etc. (*h*)	6.70	148.80	155.60	1.2	37.8	39.0	1.60	80.40	81.90	0.5	37.2	37.6
Other (*i*)	14.10	119.50	133.60	3.1	38.8	41.9	6.80	67.40	74.20	2.5	39.0	41.4
Total non-manufacturing	*14.00*	*135.40*	*149.40*	*2.6*	*38.2*	*40.9*	*3.60*	*74.30*	*77.90*	*1.2*	*38.6*	*39.8*
Total all industries	**15.70**	**132.10**	**147.80**	**3.1**	**38.3**	**41.3**	**4.20**	**73.50**	**77.80**	**1.4**	**38.6**	**40.0**
	ADULT FEMALES						JUNIOR FEMALES					
Manufacturing	4.70	94.80	99.40	1.2	37.8	38.9	1.60	64.40	66.00	0.6	38.2	38.8
Non-manufacturing	2.80	112.40	115.10	0.7	37.7	38.4	1.30	68.50	69.70	0.5	38.3	38.8
Total all industries	**3.30**	**107.00**	**110.40**	**0.8**	**37.7**	**38.5**	**1.30**	**67.90**	**69.20**	**0.5**	**38.3**	**38.8**

(*a*) Averages for all employees represented in the survey. *See* page 278. (*b*) Total (private and government) employees. (*c*) Last pay-period in October. For definitions and particulars of scope of the survey, etc., *see* pages 278–80. (*d*) Paper and paper products, printing and publishing. (*e*) Fabricated metal products; other industrial machinery and equipment and household appliances. (*f*) Wood, wood products and furniture; glass, clay and other non-metallic mineral products; and leather, rubber and plastic products and manufacturing not elsewhere classified. (*g*) Finance, insurance, real estate and business services. (*h*) Public administration and defence (excluding defence forces). (*i*) Forestry, logging, fishing, hunting, entertainment, recreation, restaurants, hotels and personal services (excludes agriculture and services to agriculture and private households employing staff).

AVERAGE WEEKLY OVERTIME AND ORDINARY TIME EARNINGS(a) FULL-TIME EMPLOYEES OTHER THAN MANAGERIAL, ETC. STAFF(b): INDUSTRIES, OCTOBER 1974(c)

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	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
AVERAGE WEEKLY OVERTIME EARNINGS(a)									
Adult males—									
Manufacturing—									
Metal products, machinery and equipment	22.00	17.40	18.40	15.20	22.80	17.50	36.40	22.50	19.40
Other	19.40	18.10	18.90	14.40	21.10	13.30	77.90	21.30	18.40
Total manufacturing	*20.80*	*17.80*	*18.70*	*14.90*	*21.90*	*14.80*	*55.50*	*21.60*	*18.90*
Non-manufacturing	14.30	12.60	14.60	9.70	17.80	10.10	30.00	16.20	14.00
Total all industries	**16.70**	**14.70**	**15.70**	**11.90**	**18.80**	**11.70**	**32.20**	**16.70**	**15.70**
Junior males	4.60	4.20	3.70	4.10	4.60	3.30	5.70	3.60	4.20
Adult females	3.70	3.50	2.50	2.40	2.70	1.90	6.30	4.20	3.30
Junior females	1.40	1.30	1.10	1.10	1.40	1.30	2.50	1.80	1.30
AVERAGE WEEKLY ORDINARY TIME EARNINGS(a)									
Adult males—									
Manufacturing—									
Metal products, machinery and equipment	128.90	130.60	120.40	125.30	123.30	137.40	128.80	130.70	128.20
Other	127.50	123.10	121.80	123.10	117.10	119.20	118.50	136.70	124.10
Total manufacturing	*128.30*	*126.70*	*121.20*	*124.40*	*119.90*	*125.60*	*124.10*	*135.50*	*126.10*
Non-manufacturing	138.40	137.00	129.00	128.80	132.10	130.60	142.60	155.70	135.40
Total all industries	**134.60**	**132.70**	**126.90**	**126.90**	**129.10**	**128.90**	**141.00**	**153.70**	**132.10**
Junior males	74.80	76.20	72.00	70.40	69.00	69.40	74.00	77.80	73.50
Adult females	108.70	106.20	102.00	105.20	103.50	118.00	110.30	121.40	107.00
Junior females	69.10	70.30	64.30	67.30	64.70	63.80	71.30	74.10	67.90
AVERAGE WEEKLY TOTAL EARNINGS									
Adult males—									
Manufacturing—									
Metal products, machinery and equipment	150.90	148.00	138.80	140.50	146.10	154.90	165.20	153.20	147.60
Other	146.90	141.20	140.60	137.50	138.10	132.60	196.40	158.10	142.50
Total manufacturing	*149.00*	*144.50*	*139.90*	*139.30*	*141.70*	*140.40*	*179.50*	*157.10*	*145.00*
Non-manufacturing	152.80	149.60	143.70	138.50	149.90	140.80	172.60	171.80	149.40
Total all industries	**151.40**	**147.40**	**142.60**	**138.80**	**147.90**	**140.60**	**173.20**	**170.40**	**147.80**
Junior males	79 40	80.40	75.70	74.50	73.60	72.80	79.70	81.40	77.80
Adult females	112.40	109.80	104.40	107.60	106.20	119.90	116.60	125.60	110.40
Junior females	70.60	71.60	65.40	68.40	66.00	65.00	73.70	76.00	69.20

(a) Average overtime and ordinary time earnings are averages for all employees represented in the survey. (b) Total (private and government) employment. (c) Last pay-period in October 1974. For definitions and particulars of scope of the survey, etc., *see* pages 278–80.

Surveys of Earnings and Hours, May 1974 and 1975

In 1974 a survey of earnings and hours was conducted in Australia in respect of the pay-period which included 31 May 1974. This survey was developed to meet the growing demand for a wider range of statistics relating to the composition and distribution of earnings and hours, according to industry, State, age category, sex, occupation, etc. Similar details were previously collected in the Survey of Wage Rates and Earnings, September 1960, and in the Surveys of Weekly Earnings in October 1965 and May 1971 (*see* page 277).

The 1975 survey was conducted in respect of the pay-period which included 30 May 1975. Results of the surveys are published in the bulletin *Composition and Distribution of Earnings and Hours* (6.52). Preliminary results of the survey are published in *Earnings and Hours of Employees, Distribution and Composition* (*Preliminary*) (6.47) as soon as returns from a large percentage of respondents have been processed. Some results of the 1975 survey for total (private and government) employees are contained in the tables on pages 283–7.

Scope of Surveys

The surveys represented most civilian wage and salary earners. Excluded were employees in agriculture, employees in private households employing staff, waterside workers employed on a casual basis and persons employed by private employers (other than hospitals) not subject to payroll tax. At the time of the survey, payroll tax was payable by employers paying more than $400 a week in wages and salaries (other than certain Australian Government bodies, religious and benevolent institutions, public hospitals and other similar organisations specifically exempted under the Australian and State Payroll Tax Acts 1971—1974).

Survey design

Details were collected from a sample of employees from all Australian and State Government departments and authorities; details for local government authorities, non-government hospitals not subject to payroll tax, and other private employers were obtained from separate stratified random samples. The majority of employers selected were requested to supply relevant details, on separate questionnaires, for only a sample of their employees. Individual employees were randomly selected by the employer in accordance with instructions supplied by the Bureau.

As the survey was based on a sample, the resultant estimates are subject to sampling variability, that is, variation which might occur by chance because only a sample of employers were surveyed. The extent of the detail published has been determined after considering estimated measures of sampling variability. A technical note on sampling variability is included in the bulletin *Composition and Distribution of Earnings and Hours* (6.52).

Comparability of results

Because of differences in sample design the results of the survey are not directly comparable with those of other surveys and series such as the October surveys (*see* page 278), the May 1971 survey (*see* page 277) and the quarterly series of average weekly earnings (*see* pages 276–7). In the October surveys and the May 1971 survey, adults included persons under 21 years of age who were paid at adult rates; in the May 1974 and 1975 surveys such persons were included with others under 21 years of age.

Definitions

Employees comprise male and female wage and salary earners (*see* Scope of Surveys above) who received pay for the specified pay-period.

Full-time employees are employees who received pay for the specified pay-period and whose standard (or rostered) weekly hours of work (*see* below) for that pay-period were at least 30 hours. Included are full-time employees on short time, full-time employees who began or ceased work during the pay-period and full-time employees on paid annual leave, paid sick leave and paid holidays. Some government employees (e.g. teachers, university lecturers), although paid for a weekly attendance of less than 30 hours, were classified as full-time.

For private employees, *other than managerial, etc. staff* were defined to include foremen or minor supervisory employees, leading hands, apprentices, trainees or cadets, clerical and office staff as well as ordinary wages employees. They exclude *managerial, executive, professional and higher supervisory staff* who, for the private sector, were not further defined. For government employees, *managerial, executive, professional and higher supervisory staff* were generally defined as those employees who (i) were ineligible to receive payment for overtime, or (ii) although subject to payment for overtime, were in charge of a significant number of employees in a separate establishment (or establishments).

Standard (*or rostered*) *weekly hours* refer to the number of hours constituting a full week's work for the specified pay-period.

Weekly hours paid for refers to the hours for which payment was made. It comprises *ordinary time hours* (*see* below) and *overtime hours*, which are those in excess of ordinary time hours. Weekly hours paid for were not reported for managerial, executive, professional and higher supervisory staff.

Ordinary time hours refers to awards, standard or agreed hours of work. It includes stand-by or reporting time which are part of standard hours, and that part of paid annual leave, paid sick leave and long-service leave taken during the specified pay-period.

Weekly earnings refers to gross earnings before taxation and other deductions have been made. It comprises *overtime earnings*, which refers to payment for overtime hours as defined above, and *ordinary time earnings*, as defined below. It includes one week's proportion of payments made other than on a weekly basis, e.g. salary paid fortnightly or monthly and paid annual or other leave taken during the specified pay-period. Pay in advance, retrospective pay and annual or periodical bonuses, etc. are excluded.

Ordinary time earnings refers to that part of weekly earnings which is attributable to ordinary time hours, as defined above. It comprises award or agreed base rates of pay for ordinary time hours paid for, including all allowances (other than overtime) specified in the award, etc.; payment by measured result, i.e. payment by incentive, piecework, task bonus, commission, etc.; and other earnings, i.e. attendance and good timekeeping bonuses, profit-sharing and any other forms of over-award, etc. pay.

Median earnings is the amount which divides the distribution into two equal groups, one having earnings above the median and the other having earnings below it. Medians were calculated from grouped data, linear interpolation being used within the class interval in which the median fell.

Mean (or average) earnings is the amount obtained by dividing the total earnings of a group (e.g. full-time employees) by the number of employees in that group. In calculating the means in the tables on pages 283 and 285 it was assumed that observations were spaced evenly across class intervals, the mid-point of each interval being used in calculating group aggregates.

ALL EMPLOYEES(*a*): WEEKLY EARNINGS, AUSTRALIA, MAY 1975(*b*)(*c*)

Weekly earnings ($)	*Number* ('000)			*Per cent of total*			*Cumulative per cent of total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Under 10	9.0	14.0	22.9	0.3	1.1	0.6	0.3	1.1	0.6
10 and under 15	9.7	13.1	22.8	0.4	1.0	0.6	0.7	2.1	1.1
15 ,, ,, 20	7.5	13.2	20.7	0.3	1.0	0.5	1.0	3.1	1.7
20 ,, ,, 25	9.6	13.5	23.1	0.4	1.0	0.6	1.3	4.1	2.2
25 ,, ,, 30	8.5	12.6	21.1	0.3	1.0	0.5	1.7	5.0	2.8
30 ,, ,, 35	7.5	12.4	19.9	0.3	0.9	0.5	1.9	6.0	3.3
35 ,, ,, 40	7.2	15.3	22.5	0.3	1.2	0.6	2.2	7.1	3.8
40 ,, ,, 45	11.4	19.1	30.5	0.4	1.4	0.8	2.6	8.6	4.6
45 ,, ,, 50	17.7	19.6	37.2	0.7	1.5	0.9	3.3	10.1	5.5
50 ,, ,, 55	23.0	36.3	59.3	0.9	2.7	1.5	4.2	12.8	7.0
55 ,, ,, 60	21.9	28.3	50.2	0.8	2.1	1.3	5.0	14.9	8.3
60 ,, ,, 65	20.9	31.4	52.3	0.8	2.4	1.3	5.8	17.3	9.6
65 ,, ,, 70	20.1	31.2	51.3	0.8	2.4	1.3	6.5	19.7	10.9
70 ,, ,, 80	39.4	74.3	113.7	1.5	5.6	2.8	8.0	25.3	13.7
80 ,, ,, 90	50.5	79.5	130.0	1.9	6.0	3.3	9.9	31.3	17.0
90 ,, ,, 100	70.0	136.1	206.1	2.6	10.3	5.2	12.5	41.7	22.1
100 ,, ,, 110	145.3	182.6	327.9	5.4	13.8	8.2	17.9	55.5	30.3
110 ,, ,, 120	213.5	166.2	379.6	8.0	12.6	9.5	25.9	68.1	39.8
120 ,, ,, 130	255.4	137.1	392.5	9.5	10.4	9.8	35.4	78.5	49.6
130 ,, ,, 140	252.4	83.5	335.9	9.4	6.3	8.4	44.8	84.8	58.0
140 ,, ,, 150	241.0	53.8	294.8	9.0	4.1	7.4	53.8	88.9	65.4
150 ,, ,, 160	199.5	40.3	239.8	7.4	3.1	6.0	61.3	91.9	71.4
160 ,, ,, 180	323.0	51.4	374.4	12.1	3.9	9.4	73.3	95.8	80.8
180 ,, ,, 200	219.1	27.7	246.8	8.2	2.1	6.2	81.5	97.9	86.9
200 ,, ,, 220	153.9	10.1	164.0	5.7	0.8	4.1	87.3	98.7	91.0
220 ,, ,, 240	108.2	10.9	116.0	4.0	0.8	2.9	91.3	99.5	93.9
240 ,, ,, 260	77.5		80.6	2.9		2.0	94.2		96.0
260 ,, ,, 280	45.1	6.3	48.1	1.7	0.5	1.2	95.9	100.0	97.2
280 and over	110.0		113.3	4.1		2.8	100.0		100.0
Total	**2,677.8**	**1,319.6**	**3,997.4**	**100.0**	**100.0**	**100.0**	..	..	..
			—dollars—						
Median earnings	145.80	106.00	130.50	..	..	..	..	..	..
Mean earnings	154.60	104.50	138.20	..	..	..	..	..	..

(*a*) Full-time and part-time employees, including managerial, etc. staff. *See* page 282 for particulars of employees excluded from the survey. (*b*) The pay-period which included 30 May 1975. (*c*) Preliminary; subject to revision.

FULL-TIME EMPLOYEES OTHER THAN MANAGERIAL, ETC. STAFF: WEEKLY EARNINGS, AUSTRALIA, MAY 1975(a)(b)

Weekly earnings $	*Males* Number ('000)	*Males* Per cent of total	*Males* Cumulative per cent of total	*Females* Number ('000)	*Females* Per cent of total	*Females* Cumulative per cent of total
AGED 21 YEARS AND OVER						
Under 50	9.0	0.4	0.4	6.0	0.7	0.7
50 and under 55	4.9	0.2	0.7	1.3	0.2	0.9
55 „ „ 60				1.7	0.2	1.1
60 „ „ 65	2.9	0.1	0.8	2.1	0.3	1.3
65 „ „ 70	2.4	0.1	1.0	3.8	0.5	1.8
70 „ „ 80	7.8	0.4	1.3	16.2	1.9	3.8
80 „ „ 90	14.2	0.7	2.0	30.5	3.7	7.4
90 „ „ 100	38.0	1.9	3.9	96.8	11.7	19.1
100 „ „ 110	115.5	5.7	9.7	156.2	18.8	37.9
110 „ „ 120	192.0	9.5	19.2	151.7	18.3	56.1
120 „ „ 130	232.1	11.5	30.8	124.1	14.9	71.1
130 „ „ 140	234.3	11.6	42.4	75.1	9.0	80.1
140 „ „ 150	225.2	11.2	53.6	48.9	5.9	86.0
150 „ „ 160	178.0	8.8	62.4	35.2	4.2	90.2
160 „ „ 180	277.9	13.8	76.3	44.6	5.4	95.6
180 „ „ 200	176.9	8.8	85.0	23.5	2.8	98.4
200 „ „ 220	113.0	5.6	90.7	6.6	0.8	99.2
220 „ „ 240	74.1	3.7	94.3	6.5	0.8	100.0
240 „ „ 260	48.8	2.4	96.8			
260 and over	65.0	3.2	100.0			
Total	**2,012.0**	**100.0**	..	**830.7**	**100.0**	..
		— dollars —				
Median earnings	146.80	..	..	116.60	..	..
Mean earnings	156.50	..	..	121.10	..	..
AGED UNDER 21 YEARS						
Under 25	0.9	0.4	0.4	2.2	1.0	1.0
25 and under 30	0.5	0.2	0.6			
30 „ „ 35	0.6	0.2	0.8			
35 „ „ 40	0.6	0.3	1.1			
40 „ „ 45	4.3	1.8	2.9	5.4	2.5	3.5
45 „ „ 50	11.2	4.7	7.5	5.6	2.6	6.1
50 „ „ 55	15.1	6.3	13.9	17.9	8.3	14.4
55 „ „ 60	13.3	5.6	19.4	10.3	4.8	19.1
60 „ „ 65	13.3	5.6	25.0	13.7	6.3	25.5
65 „ „ 70	14.8	6.2	31.2	14.6	6.7	32.2
70 „ „ 80	25.6	10.7	41.9	35.6	16.4	48.6
80 „ „ 90	31.9	13.4	55.2	36.0	16.6	65.2
90 „ „ 100	28.5	11.9	67.2	30.4	14.0	79.3
100 „ „ 110	26.8	11.2	78.4	19.0	8.8	88.0
110 „ „ 120	17.2	7.2	85.6	11.4	5.2	93.3
120 „ „ 130	9.7	4.0	89.6	8.4	3.9	97.2
130 „ „ 140	9.5	4.0	93.6	2.7	1.2	98.4
140 „ „ 150	4.6	1.9	95.5	3.4	1.6	100.0
150 and over	10.7	4.5	100.0			
Total	**239.0**	**100.0**	..	**216.5**	**100.0**	..
		— dollars —				
Median earnings	86.00	..	..	80.80	..	..
Mean earnings	89.20	..	..	81.90	..	..

(a) The pay-period which included 30 May 1975. (b) Preliminary; subject to revision.

FULL-TIME EMPLOYEES PAID FOR A FULL WEEK (a), OTHER THAN MANAGERIAL, ETC. STAFF: WEEKLY EARNINGS, AUSTRALIA, MAY 1975 (b) (c)

	Males			*Females*		
Weekly earnings ($)	*Number* ('000)	*Per cent of total*	*Cumulative per cent of total*	*Number* ('000)	*Per cent of total*	*Cumulative per cent of total*
			AGED 21 YEARS AND OVER			
Under 70	3.4	0.2	0.2	4.7	0.6	0.6
70 and under 80	2.6	0.1	0.3	10.1	1.3	1.9
80 " " 90	5.0	0.3	0.6	21.8	2.8	4.7
90 " " 100	26.4	1.4	2.0	87.1	11.3	16.0
100 " " 110	98.9	5.4	7.4	147.5	19.1	35.1
110 " " 120	174.0	9.5	16.9	146.2	18.9	54.0
120 " " 130	213.9	11.6	28.5	119.8	15.5	69.6
130 " " 140	218.4	11.9	40.4	73.4	9.5	79.1
140 " " 150	212.9	11.6	52.0	47.8	6.2	85.3
150 " " 160	167.2	9.1	61.1	34.0	4.4	89.7
160 " " 180	263.7	14.3	75.4	44.1	5.7	95.4
180 " " 200	167.0	9.1	84.5	23.2	3.0	98.4
200 " " 220	107.9	5.9	90.4	6.4	0.8	99.2
220 " " 240	70.7	3.8	94.2	4.5	0.6	99.8
240 " " 260	46.3	2.5	96.8	0.7	0.1	99.9
260 and over	59.6	3.2	100.0	1.0	0.1	100.0
Total	**1,837.7**	**100.0**	..	**772.2**	**100.0**	..
		—dollars—				
Median earnings	148.30	..	..	117.90	..	..
Mean earnings	158.80	..	..	123.30	..	..
			AGED UNDER 21 YEARS			
Under 40	0.8	0.4	0.4	0.9	0.5	0.5
40 and under 45	3.4	1.6	1.9	5.2	2.5	2.9
45 " " 50	10.0	4.7	6.6	4.8	2.3	5.2
50 " " 55	13.0	6.1	12.7	17.3	8.3	13.5
55 " " 60	11.9	5.6	18.2	10.0	4.8	18.3
60 " " 65	12.3	5.7	24.0	13.1	6.3	24.6
65 " " 70	12.9	6.0	30.0	14.2	6.8	31.4
70 " " 80	22.8	10.7	40.7	34.2	16.3	47.7
80 " " 90	29.7	13.9	54.5	35.1	16.8	64.5
90 " " 100	26.2	12.2	66.8	30.0	14.3	78.8
100 " " 110	23.6	11.0	77.8	18.7	8.9	87.7
110 " " 120	15.8	7.4	85.2	11.2	5.3	93.1
120 " " 130	8.9	4.2	89.3	8.4	4.0	97.1
130 " " 140	9.1	4.2	93.6	2.7	1.3	98.4
140 " " 150	3.9	1.8	95.4	3.4	1.6	100.0
150 and over	9.9	4.6	100.0			
Total	**214.3**	**100.0**	..	**209.4**	**100.0**	..
		—dollars—				
Median earnings	86.70	..	..	81.40	..	..
Mean earnings	90.40	..	..	82.90	..	..

(a) Refers to employees whose ordinary time hours paid for were at least equal to their standard (or rostered) hours of work. (b) The pay-period which included 30 May 1975. (c) Preliminary; subject to revision.

COMPOSITION OF AVERAGE WEEKLY EARNINGS FULL-TIME EMPLOYEES OTHER THAN MANAGERIAL, ETC. STAFF: INDUSTRIES, AUSTRALIA, MAY 1975(*a*)(*b*)

($)

	Males			*Females*		
ASIC industry	*Over-time*	*Ordinary time(c)*	*Total*	*Over-time*	*Ordinary time(c)*	*Total*
AGED 21 YEARS AND OVER						
Manufacturing—						
Food, beverages and tobacco	17.90	129.30	147.20	4.40	106.10	110.50
Textiles; clothing and footwear	16.40	125.60	142.00	3.40	101.20	104.50
Paper, printing, etc.	12.50	145.70	158.10	3.70	109.60	113.30
Chemical, petroleum and coal products	14.30	144.40	158.70	2.20	116.30	118.50
Metal products, machinery and equipment—						
Basic metal products	21.60	143.10	164.60	2.70	117.80	120.50
Fabricated metal products; other machinery, etc.(*d*)	16.60	129.90	146.50	4.50	107.90	112.30
Transport equipment	10.50	133.30	143.90	3.10	107.00	110.10
Total	15.90	133.90	149.70	4.00	108.70	112.70
Other(*e*)	18.30	127.50	145.80	3.20	105.30	108.50
Total manufacturing	*16.30*	*133.10*	*149.40*	*3.70*	*106.40*	*110.00*
Non-manufacturing—						
Mining	40.10	169.10	209.20	7.00	124.60	131.50
Electricity, gas and water	10.60	156.70	167.30	1.60	130.70	132.30
Construction	16.30	142.90	159.20	2.10	118.50	120.60
Wholesale trade	9.10	134.50	143.70	2.30	113.00	115.20
Retail trade	8.40	128.30	136.70	2.50	106.50	109.00
Transport and storage; communication	18.40	150.10	168.50	5.20	127.60	132.80
Finance, business services	4.50	147.90	152.40	0.90	118.30	119.20
Public administration and defence; community services(*f*)	6.50	159.70	166.20	1.90	135.50	137.40
Other(*g*)	15.80	130.60	146.40	4.60	110.60	115.30
Total non-manufacturing	*13.10*	*147.10*	*160.20*	*2.40*	*123.40*	*125.80*
Total all industries	**14.20**	**142.30**	**156.50**	**2.80**	**118.30**	**121.10**
AGED UNDER 21 YEARS						
Manufacturing—						
Food, beverages and tobacco	9.50	85.00	94.50	2.30	74.90	77.20
Textiles; clothing and footwear	5.50	81.80	87.30	1.60	73.40	75.10
Paper, printing, etc.	4.70	84.50	89.20	1.40	73.70	75.10
Chemical, petroleum and coal products	2.30	98.60	100.90	0.30	92.30	92.60
Metal products, machinery and equipment—						
Basic metal products	5.90	86.10	91.90	..	76.60	76.60
Fabricated metal products; other machinery, etc.(*d*)	6.10	73.70	79.80	1.20	79.30	80.50
Transport equipment	2.40	79.30	81.70	1.70	72.50	74.20
Total	5.20	77.30	82.60	1.10	78.30	79.40
Other(*e*)	6.30	78.40	84.70	2.10	75.60	77.70
Total manufacturing	*5.90*	*79.90*	*85.80*	*1.60*	*76.20*	*77.80*
Non-manufacturing—						
Mining	23.20	114.20	137.40	3.30	79.50	82.80
Electricity, gas and water	1.50	96.60	98.10	0.60	89.90	90.50
Construction	4.80	93.80	98.60	..	78.30	78.40
Wholesale trade	4.80	80.30	85.00	1.20	75.80	77.00
Retail trade	3.90	73.30	77.20	1.70	68.40	70.00
Transport and storage; communication	6.70	88.40	95.10	2.40	94.90	97.30
Finance, business services	1.30	85.40	86.70	0.90	80.90	81.80
Public administration and defence; community services(*f*)	1.80	98.20	100.10	1.00	91.60	92.70
Other(*g*)	5.00	79.50	84.50	1.80	74.10	75.90
Total non-manufacturing	*4.40*	*86.20*	*90.60*	*1.30*	*81.30*	*82.60*
Total all industries	**4.90**	**84.30**	**89.20**	**1.30**	**80.60**	**81.90**

(*a*) The pay-period which included 30 May 1975. (*b*) Preliminary; subject to revision. (*c*) *See* page 283. (*d*) ASIC sub-divisions 31 and 33. (*e*) ASIC sub-divisions 25, 28 and 34 (wood, wood products and furniture; non-metallic mineral products; and miscellaneous manufacturing). (*f*) Excludes defence forces. (*g*) ASIC sub-divisions 03 and 04 (forestry and logging; fishing and hunting) and part of division L (entertainment, recreation, restaurants, hotels and personal services, excluding private households employing staff).

COMPOSITION OF AVERAGE WEEKLY HOURS PAID FOR FULL-TIME EMPLOYEES OTHER THAN MANAGERIAL, ETC. STAFF: INDUSTRIES, AUSTRALIA, MAY 1975 (*a*) (*b*)

	Males			*Females*		
ASIC industry	*Over-time*	*Ordinary time*	*Total*	*Over-time*	*Ordinary time*	*Total*
AGED 21 YEARS AND OVER						
Manufacturing—						
Food, beverages and tobacco	3.5	38.9	42.4	1.0	38.0	39.0
Textiles; clothing and footwear	3.5	39.1	42.6	0.9	38.3	39.2
Paper, printing, etc.	2.2	39.3	41.5	0.8	37.8	38.6
Chemical, petroleum and coal products	2.6	38.5	41.0	0.5	38.4	38.9
Metal products, machinery and equipment—						
Basic metal products	4.1	38.6	42.7	0.6	38.1	38.7
Fabricated metal products; other machinery, etc. (*c*)	3.2	38.7	41.9	1.1	38.4	39.4
Transport equipment	1.9	38.9	40.8	0.7	37.8	38.5
Total	3.0	38.8	41.8	1.0	38.2	39.2
Other (*d*)	3.7	39.0	42.7	0.8	38.4	39.1
Total manufacturing	*3.1*	*38.9*	*42.0*	*0.9*	*38.2*	*39.1*
Non-manufacturing—						
Mining	6.9	37.2	44.1	1.3	38.0	39.4
Electricity, gas and water	1.7	39.1	40.8	0.3	36.5	36.8
Construction	2.8	39.0	41.7	0.4	37.6	38.0
Wholesale trade	1.7	38.8	40.6	0.5	37.9	38.5
Retail trade	1.8	39.7	41.5	0.6	38.9	39.5
Transport and storage; communication	3.2	38.8	41.9	1.0	37.3	38.4
Finance, business services	0.8	39.0	39.8	0.2	37.9	38.1
Public administration and defence; community services (*e*)	1.1	38.2	39.2	0.4	37.8	38.1
Other (*f*)	3.3	39.5	42.7	1.1	38.6	39.7
Total non-manufacturing	*2.3*	*38.8*	*41.1*	*0.5*	*38.0*	*38.5*
Total all industries	**2.6**	**38.8**	**41.4**	**0.6**	**38.1**	**38.7**
AGED UNDER 21 YEARS						
Manufacturing—						
Food, beverages and tobacco	2.5	38.0	40.5	0.7	36.9	37.7
Textiles; clothing and footwear	1.5	38.7	40.3	0.6	38.3	38.9
Paper, printing, etc.	1.2	39.6	40.9	0.4	38.3	38.7
Chemical, petroleum and coal products	0.5	38.6	39.0	0.1	37.8	37.9
Metal products, machinery and equipment—						
Basic metal products	1.5	38.5	40.0	..	39.3	39.3
Fabricated metal products; other machinery, etc. (*c*)	1.7	38.1	39.8	0.3	38.9	39.2
Transport equipment	0.7	38.7	39.4	0.6	37.8	38.4
Total	1.5	38.3	39.8	0.3	38.8	39.1
Other (*d*)	1.7	38.5	40.2	0.6	39.4	40.1
Total manufacturing	*1.6*	*38.4*	*40.0*	*0.5*	*38.3*	*38.8*
Non-manufacturing—						
Mining	5.2	37.7	42.9	1.5	38.7	40.3
Electricity, gas and water	0.3	38.4	38.8	0.2	36.3	36.5
Construction	1.1	39.4	40.5	..	38.1	38.1
Wholesale trade	1.4	38.9	40.3	0.4	38.7	39.1
Retail trade	1.3	39.7	40.9	0.6	39.6	40.2
Transport and storage; communication	1.6	38.4	40.0	0.8	37.2	38.0
Finance, business services	0.3	39.1	39.4	0.3	38.8	39.1
Public administration and defence; community services (*e*)	0.5	37.9	38.3	0.3	38.1	38.3
Other (*f*)	1.7	38.1	39.8	0.5	39.2	39.6
Total non-manufacturing	*1.2*	*38.9*	*40.1*	*0.4*	*38.6*	*39.0*
Total all industries	**1.3**	**38.7**	**40.1**	**0.4**	**38.6**	**39.0**

(*a*) The pay-period which included 30 May 1975. (*b*) Preliminary; subject to revision. (*c*) ASIC sub-divisions 31 and 33. (*d*) ASIC sub-divisions 25, 28 and 34 (wood, wood products and furniture; non-metallic mineral products; and miscellaneous manufacturing). (*e*) Excludes defence forces. (*f*) ASIC sub-divisions 03 and 04 (forestry and logging; fishing and hunting) and part of division L (entertainment, recreation, restaurants, hotels and personal services, excluding private households employing staff).

Survey of income distribution 1973-74

In November 1974 a survey, based on the quarterly population survey (*see* the chapter Employment and Unemployment), was conducted throughout Australia in order to obtain information about the distribution of personal and family income within Australia. Some details of individuals' income are shown in the tables below. Further information can be obtained from the publication *Income Distribution*, 1973–74 *Part* 1 (Ref. No. 17.6) while details of family income, when available, will be contained in Part 2 of this series.

A similar survey was conducted in November 1969 of individual and family income received during 1968–69. Results of this survey are published in *Income Distribution* 1968–69, *Consolidated and Revised Edition* (Ref. No. 17.17).

The survey was based on a multi-stage area sample of private dwellings (about 20,000 houses, flats, etc.) and covered slightly less than one-half of one percent of the population of Australia. Questions were asked in respect of each person aged 15 years or over in the sample on the amount of income received in 1973–74 from each of the following sources: (1) money wages or salary; (2) own business, trade or profession (net income); (3) share in partnership (net income); (4) government social service benefits; (5) superannuation or annuity; (6) interest, dividends, rent, etc.; (7) other sources, e.g. trust or will, maintenance or alimony.

The following points should be kept in mind in interpreting the results.

(i) For the purposes of the survey, income was defined to include (a) all income received while living in Australia, including income received from an overseas source and (b) all income received from an Australian source while living overseas.

(ii) A person included in the survey in November 1974 who had lived outside Australia for the whole of 1973–74 was not asked the income questions. A person who had arrived in Australia towards the end of the reference year would have been recorded as receiving little or no income in Australia.

(iii) The income received by a person does not necessarily reflect the standard of living of that person. For example, although alimony and maintenance payments were counted as income, gifts or donations such as might be made by relatives were not included, even though such gifts or donations may have been the sole means of support. No account was taken of the possible run-down of assets accumulated in the past.

(iv) Some individuals may have received no income in 1973–74, they may, for example, have been at school or university, and in such cases their income would have been recorded as nil.

(v) In many cases the answers to questions on income were based on memory, and frequently on the memory or knowledge of one person, generally the housewife. Some understatement in the estimates may be expected because of imperfect recall of minor or irregular sources of income.

Explanations of the terms used in the tables beginning on page 290 are given in the following paragraphs.

Earned income is income from wages or salary or income from own business, trade or profession or income from a share in a partnership, or the sum of any of these components. Recipients of earned income are referred to as 'income earners' or 'persons with earned income', as distinct from the all-inclusive term 'income recipients', which refers to persons who received income from any source. It should be noted that 'income earners' include some persons who were recorded as having earned income but for whom no duration of employment was shown. Many of these persons were reported as having received income from a share in a partnership.

Unearned income is income from government social service benefits or income from superannuation or annuity or income from interest, dividends, rent, etc. or income from other sources (e.g. a trust or will), or the sum of any of these components.

Median income is the amount which divides the distribution into two equal groups, one having income above the median and the other having income below it. Medians were calculated from grouped data. Linear interpolation was used within the class interval in which the median fell.

Mean income is the amount obtained by dividing the total income of a group (e.g. income earners, full-year, full-time workers) by the number of units in that group.

Standard errors. Since the estimates are based on a sample they are subject to sampling variability. The following table, while not giving a precise measure of the standard error of a particular estimate, does provide an indication of the magnitude.

APPROXIMATE STANDARD ERRORS OF ESTIMATES

Size of estimate (Persons)	*Approximate standard error of estimates*		*Size of estimate (Persons)*	*Approximate standard error of estimates*	
	Persons	*Per cent of estimate*		*Persons*	*Per cent of estimate*
4,000 . . .	900	23.0	100,000	5,000	5.0
5,000 . .	1,000	20.4	200,000	7,200	3.6
10,000 . .	1,500	15.0	500,000	11,500	2.3
20,000 . .	2,200	11.0	1,000,000	17,000	1.7
50,000 . .	3,500	7.0	2,000,000	24,000	1.2

Estimates less than 4,000 have not been shown in the tables as they would be subject to such high standard errors as to detract seriously from their value for most reasonable uses. Although such estimates may be derived by subtraction they should not be regarded as reliable.

Although income levels have risen considerably since 1973–74, the findings of the survey with regard to dispersion and relativity of income are still valuable. As a measure of the rise, average weekly earnings per employed male unit (a series which refers only to wage and salary earners and which is published quarterly in a mimeographed statement (6.18)) may be used as a rough guide. Average weekly earnings in 1973–74, 1974–75 and 1975–76 were $118.00, $148.20 and $169.50 respectively.

ALL INCOME RECIPIENTS(*a*): TOTAL INCOME, AUSTRALIA, 1973–74(*b*)

Total income(c) ($)	*Number* ('000)			*Total income(c)* ($)	*Cumulative per cent of all income recipients*		
	Males	*Females*	*Persons*		*Males*	*Females*	*Persons*
1 and under 200	76.4	887.6	964.0	Under 200	1.7	20.8	11.0
200 „ „ 400	35.9	225.6	261.5	„ 400	2.5	26.1	14.0
400 „ „ 600	30.5	152.3	182.8	„ 600	3.2	29.7	16.1
600 „ „ 800	31.4	103.0	134.4	„ 800	3.9	32.1	17.7
800 „ „ 1,000	43.8	105.6	149.5	„ 1,000	4.9	34.6	19.4
1,000 „ „ 1,200	173.1	291.7	464.9	„ 1,200	8.8	41.4	24.7
1,200 „ „ 1,400	155.2	427.9	583.1	„ 1,400	12.2	51.4	31.4
1,400 „ „ 1,600	74.0	155.0	229.0	„ 1,600	13.9	55.1	34.0
1,600 „ „ 1,800	51.7	112.5	164.2	„ 1,800	15.0	57.7	35.9
1,800 „ „ 2,000	51.0	99.7	150.7	„ 2,000	16.2	60.0	37.6
2,000 „ „ 2,500	149.0	243.1	392.1	„ 2,500	19.5	65.7	42.1
2,500 „ „ 3,000	136.8	208.8	345.6	„ 3,000	22.6	70.6	46.1
3,000 „ „ 3,500	166.6	229.9	396.4	„ 3,500	26.3	76.0	50.6
3,500 „ „ 4,000	181.8	233.6	415.4	„ 4,000	30.4	81.5	55.4
4,000 „ „ 4,500	282.8	197.6	480.4	„ 4,500	36.7	86.1	60.9
4,500 „ „ 5,000	298.5	139.9	438.3	„ 5,000	43.4	89.4	65.9
5,000 „ „ 5,500	392.8	147.7	540.5	„ 5,500	52.2	92.9	72.1
5,500 „ „ 6,000	289.6	64.6	354.2	„ 6,000	58.7	94.4	76.1
6,000 „ „ 6,500	349.0	61.8	410.8	„ 6,500	66.5	95.6	80.8
6,500 „ „ 7,000	242.9	32.2	275.1	„ 7,000	71.9	96.6	84.0
7,000 „ „ 7,500	222.1	29.9	252.0	„ 7,500	76.9	97.3	86.9
7,500 „ „ 8,000	170.6	19.3	189.9	„ 8,000	80.7	97.7	89.0
8,000 „ „ 8,500	158.9	19.6	178.5	„ 8,500	84.3	98.2	91.1
8,500 „ „ 9,000	110.8	13.6	124.3	„ 9,000	86.8	98.5	92.5
9,000 „ „ 9,500	90.1	10.1	100.2	„ 9,500	88.8	98.7	93.6
9,500 „ „ 10,000	63.4	7.2	70.6	„ 10,000	90.2	98.9	94.5
10,000 „ „ 11,000	141.3	15.4	156.6	„ 11,000	93.4	99.3	96.2
11,000 „ „ 12,000	57.5	4.5	62.0	„ 12,000	94.6	99.4	97.0
12,000 „ „ 13,000	59.5	5.8	65.4	„ 13,000	96.0	99.5	97.7
13,000 „ „ 15,000	55.8	8.7	64.5	„ 15,000	97.2	99.7	98.4
15,000 „ „ 17,000	48.0	5.1	53.1	„ 17,000	98.3	99.9	99.1
17,000 „ „ 19,000	19.8	5.5	22.2	„ 19,000	98.7	99.9	99.3
19,000 „ „ 21,000	18.2		19.3	„ 21,000	99.1	99.9	99.5
21,000 „ „ 23,000	8.4		8.4	„ 23,000	99.3	99.9	99.6
23,000 „ „ 25,000	7.7		7.8	„ 25,000	99.5	99.9	99.7
25,000 „ „ 30,000	9.0		10.8	„ 30,000	99.7	100.0	99.8
30,000 „ „ 35,000	5.1	*	5.4	„ 35,000	99.8	100.0	99.9
35,000 and over . .	7.9		8.3				
Total . .	**4,466.8**	**4,265.6**	**8,732.5**	**Total .**	**100.0**	**100.0**	**100.0**
	—dollars—						
Median income . .	5,380	1,370	3,430		..	..	..
Mean income . .	5,710	2,160	3,980		..	..	..

(*a*) Non-institutional population aged 15 years and over. (*b*) For definitions *see* page 288. (*c*) From all sources.
* Less than 4,000. *See* comment on standard errors, page 289.

PERSONS WITH EARNED INCOME(*a*): EARNED INCOME, 1973–74(*b*)

Earned income ($)	*Number* ('000) *Males*	*Females*	*Persons*	*Earned income* ($)	*Cumulative per cent of all income earners* *Males*	*Females*	*Persons*
1 and under 200	69.3	124.4	193.7	Under 200	1.7	5.3	3.0
200 ,, ,, 400	49.6	112.2	161.7	,, 400	3.0	10.0	5.6
400 ,, ,, 600	38.7	95.1	133.8	,, 600	3.9	14.1	7.7
600 ,, ,, 800	33.7	79.7	113.4	,, 800	4.8	17.4	9.5
800 ,, ,, 1,000	42.7	77.1	119.8	,, 1,000	5.8	20.7	11.4
1,000 ,, ,, 1,200	58.6	89.2	147.8	,, 1,200	7.3	24.5	13.7
1,200 ,, ,, 1,400	36.1	79.3	115.4	,, 1,400	8.2	27.8	15.5
1,400 ,, ,, 1,600	38.8	73.2	112.0	,, 1,600	9.2	30.9	17.3
1,600 ,, ,, 1,800	31.9	57.2	89.1	,, 1,800	10.0	33.3	18.7
1,800 ,, ,, 2,000	29.5	61.7	91.2	,, 2,000	10.7	36.0	20.1
2,000 ,, ,, 2,500	108.8	182.2	291.0	,, 2,500	13.4	43.7	24.7
2,500 ,, ,, 3,000	115.4	181.8	297.2	,, 3,000	16.3	51.4	29.3
3,000 ,, ,, 3,500	151.6	206.4	358.0	,, 3,500	20.1	60.1	35.0
3,500 ,, ,, 4,000	175.3	219.6	394.9	,, 4,000	24.5	69.4	41.2
4,000 ,, ,, 4,500	278.3	185.8	464.1	,, 4,500	31.4	77.3	48.5
4,500 ,, ,, 5,000	287.4	133.1	420.5	,, 5,000	38.6	82.9	55.1
5,000 ,, ,, 5,500	393.7	133.2	526.9	,, 5,500	48.5	88.6	63.3
5,500 ,, ,, 6,000	280.7	62.1	342.8	,, 6,000	55.5	91.2	68.7
6,000 ,, ,, 6,500	343.3	57.5	400.8	,, 6,500	64.1	93.6	75.0
6,500 ,, ,, 7,000	236.8	27.8	264.6	,, 7,000	70.0	94.8	79.2
7,000 ,, ,, 7,500	219.3	21.7	241.0	,, 7,500	75.5	95.7	83.0
7,500 ,, ,, 8,000	165.8	20.2	186.0	,, 8,000	79.6	96.6	85.9
8,000 ,, ,, 8,500	154.4	19.7	174.1	,, 8,500	83.5	97.4	88.6
8,500 ,, ,, 9,000	106.7	14.5	121.2	,, 9,000	86.1	98.0	90.5
9,000 ,, ,, 9,500	83.7	6.3	90.0	,, 9,500	88.2	98.3	92.0
9,500 ,, ,, 10,000	59.8	5.3	65.1	,, 10,000	89.7	98.5	93.0
10,000 ,, ,, 11,000	143.9	14.3	158.3	,, 11,000	93.3	99.1	95.5
11,000 ,, ,, 12,000	52.4	*	55.9	,, 12,000	94.6	99.2	96.3
12,000 ,, ,, 13,000	56.5	5.5	62.0	,, 13,000	96.0	99.5	97.3
13,000 ,, ,, 15,000	50.5	5.7	56.2	,, 15,000	97.3	99.7	98.2
15,000 ,, ,, 17,000	40.2	4.3	43.3	,, 17,000	98.3	99.9	98.9
17,000 ,, ,, 19,000	20.0		21.2	,, 19,000	98.8	99.9	99.2
19,000 ,, ,, 21,000	19.0	*	19.4	,, 21,000	99.3	99.9	99.5
21,000 ,, ,, 23,000	4.8		4.8	,, 23,000	99.4	99.9	99.6
23,000 ,, ,, 25,000	5.3		5.9	,, 25,000	99.5	99.9	99.7
25,000 ,, ,, 30,000	7.0		7.1	,, 30,000	99.7	99.9	99.8
30,000 ,, ,, 35,000	6.0		6.3	,, 35,000	99.8	100.0	99.9
35,000 and over	6.2		6.6				
Total	**4,001.5**	**2,361.4**	**6,362.9**	**Total**	**100.0**	**100.0**	**100.0**
		—dollars—					
Median income	5,610	2,910	4,620		..	..	..
Mean income	5,990	3,060	4,900		..	..	..

(*a*) Non-institutional population aged 15 years and over. (*b*) For definitions *see* page 288.
* Less than 4,000. *See* comment on standard errors, page 289.

PERSONS WITH UNEARNED INCOME (*a*): BY SOURCE, 1973-74 (*b*)

All income from source shown ($)	*Government social service benefits*			*Interest, dividends, rent, etc.*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
			—'000—			
1 and under 50	27.0	496.8	523.8	635.3	582.1	1,217.4
50 " " 100	18.1	653.8	671.9	180.9	125.5	306.4
100 " " 150	23.1	99.8	122.9	94.0	70.2	164.2
150 " " 200	24.9	330.1	355.0	53.5	36.8	90.3
200 " " 250	15.8	32.8	48.6	59.7	35.8	95.5
250 " " 300	15.0	134.3	149.3	27.7	25.8	53.5
300 " " 400	22.3	35.1	57.4	44.0	36.2	80.2
400 " " 500	21.3	60.6	81.9	36.6	27.0	63.6
500 " " 600	17.7	35.9	53.6	30.2	26.2	56.3
600 " " 700	19.1	19.6	38.6	15.7	14.0	29.7
700 " " 800	19.0	18.1	37.1	16.3	17.0	33.3
800 " " 900	16.9	19.9	36.8	8.9	13.7	22.5
900 " " 1,100	208.1	234.5	442.6	28.8	16.8	45.6
1,100 " " 1,300	130.2	410.2	540.4	15.7	9.6	25.3
1,300 " " 1,500	36.4	65.6	101.9	7.0	5.1	12.1
1,500 " " 2,000	31.7	63.3	95.0	20.9	17.2	38.1
2,000 " " 3,000	28.3	40.2	68.5	26.8	22.7	49.5
3,000 " " 4,000	6.7	6.1	12.7	16.6	11.9	28.5
4,000 " " 5,000	*	*	4.2	9.7	6.1	15.9
5,000 " " 6,000				11.7	5.5	17.2
6,000 and over				14.3	10.8	25.1
Total	**684.7**	**2,757.4**	**3,442.1**	**1,354.1**	**1,116.1**	**2,470.1**
			—dollars—			
Median income	1,070	180	250	50	40	50
Mean income	980	490	590	440	410	430

All income from source shown ($)	*Superannuation, annuity*			*Other income*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
			—'000—			
1 and under 50	*	6.7	10.6	5.3	7.4	12.7
50 " " 100	4.5	4.2	8.7	5.6	4.4	10.0
100 " " 150	4.6	*	5.1	4.4	4.0	5.7
150 " " 200		4.6	7.0		*	6.1
200 " " 250	4.3	5.0	5.3	4.3	4.5	7.8
250 " " 300			4.1		*	*
300 " " 400	5.0	4.9	9.9	4.9	6.6	10.3
400 " " 500	5.5	*	5.7		5.9	7.1
500 " " 600		5.5	8.6	5.6	8.6	11.8
600 " " 700	4.1	6.2	6.2		*	5.5
700 " " 800	6.9		8.7	*	4.9	6.1
800 " " 900	8.0		10.4		*	*
900 " " 1,100	7.0	6.7	9.9	4.7	6.6	11.3
1,100 " " 1,300	*		7.0	5.3	4.1	6.4
1,300 " " 1,500	4.4	6.2	6.7		*	4.5
1,500 " " 2,000	12.9		16.8		8.4	10.2
2,000 " " 3,000	11.1	7.7	18.8	5.3	7.5	12.8
3,000 " " 4,000	12.5	4.2	16.0	5.5	4.2	5.0
4,000 " " 5.000	6.0		6.3		5.2	*
5,000 " " 6,000	5.6		6.1			
6,000 and over	*	*	*			6.2
Total	**113.4**	**68.3**	**181.7**	**52.9**	**97.8**	**150.7**
			—dollars—			
Median income	1,250	550	910	540	620	590
Mean income	1,910	960	1,550	1,380	1,160	1,230

(*a*) Non-institutional population aged 15 years and over. (*b*) For definitions *see* page 288.
* Less than 4,000. *See* comment on standard errors, page 289.

ALL INCOME RECIPIENTS (*a*): AGE AND PRINCIPAL SOURCE OF INCOME, 1973-74 (*b*)

('000)

Age group (years)	*Principal source of income*							
	Wages or salary	*Own business, trade or profession*	*Share in partnership*	*Government social service benefits*	*Superannuation or annuity*	*Interest, rent, dividends, etc.*	*Other income*	*Total*
				MALES				
15–19	343.3	*	*	21.2	5.2	14.0	7.4	390.5
20–24	484.2	13.5	15.4	20.5		4.5		543.1
25–34	842.0	64.4	71.4	10.1		*	5.1	992.8
35–44	611.6	70.7	72.8	11.6	*			768.1
45–54	615.1	61.5	58.8	22.1		8.9		770.0
55–59	221.3	27.0	22.0	18.4		5.9		296.6
60–64	169.2	21.0	20.9	30.9	7.0	12.5		261.8
65 and over	66.3	15.7	15.7	280.9	29.4	33.8		444.0
Total	*3,353.1*	*276.9*	*279.6*	*415.7*	*45.4*	*83.7*	*12.5*	*4,466.8*
				FEMALES				
15–19	316.9	*	*	42.9	4.8	14.4	5.6	380.2
20–24	384.1		8.2	122.3		6.9		528.7
25–34	451.7	12.6	58.1	399.0		20.5	8.1	950.3
35–44	351.6	10.2	57.9	274.1		18.4	7.6	721.2
45–54	326.9	17.2	41.1	190.1	*	48.8	7.0	633.3
55–59	86.8	7.6	16.0	85.2		37.2	4.0	235.6
60–64	36.7	4.3	13.0	141.0	4.3	35.2		236.6
65 and over	13.8	*	9.7	493.6	10.3	44.5	4.6	579.9
Total	*1,968.4*	*59.1*	*204.5*	*1,748.2*	*22.7*	*225.9*	*36.9*	*4,265.6*
				PERSONS				
15–19	660.2	*	*	64.2	4.6	28.4	7.1	770.7
20–24	868.3	17.4	23.6	142.8	4.2	11.4	5.9	1,071.7
25–34	1,293.7	77.0	129.5	409.1		23.4	8.6	1,943.1
35–44	963.2	81.0	130.7	285.7	*	19.5	7.7	1,489.3
45–54	942.0	78.7	99.9	212.2	4.5	57.7	8.4	1,403.2
55–59	308.1	34.6	38.0	103.6	*	43.1	5.1	532.1
60–64	205.9	25.2	33.8	171.9	11.3	47.7		498.4
65 and over	80.1	19.1	25.5	774.5	39.7	78.4	6.7	1,023.9
Total	**5,321.5**	**336.1**	**484.0**	**2,163.9**	**68.1**	**309.6**	**49.4**	**8,732.5**

(*a*) Non-institutional population aged 15 years and over. (*b*) For definitions *see* page 288.
* Less than 4,000. *See* comment on standard errors, page 289.

MEAN TOTAL INCOME OF ALL INCOME RECIPIENTS(*a*): AGE AND PRINCIPAL SOURCE OF INCOME, 1973–74(*b*)
($)

Age group (years)	*Principal source of income* *Wages or salary*	*Own business, trade or profession*	*Share in partnership*	*Government social service benefits*	*Superannuation or annuity*	*Interest, rent, dividends, etc.*	*Other income*	*Total*
MALES								
15–19	2,040	*	*	620	1,410	290	1,420	1,910
20–24	4,760	6,270	6,000	1,810		4,430		4,700
25–34	6,640	7,810	6,630	1,790		*	8,050	6,660
35–44	7,160	8,070	6,920	1,760	*	7,090		7,130
45–54	7,240	8,690	6,620	1,610				7,140
55–59	6,510	6,860	5,610	1,570		6,380		6,190
60–64	6,480	8,600	6,340	1,670	5,780	3,630		5,910
65 and over	5,540	7,270	5,430	1,410	4,420	4,320		2,810
Total	*6,060*	*7,870*	*6,500*	*1,440*	*4,310*	*4,060*	*4,130*	*5,710*
FEMALES								
15–19	1,680	*	*	630	1,250	330	900	1,490
20–24	3,280		3,930	460		280		2,580
25–34	3,540	3,020	4,390	250		840	2,390	2,130
35–44	3,310	4,050	5,730	410	*	1,730	2,230	2,360
45–54	3,560	3,780	4,480	520		1,650	1,420	2,540
55–59	3,640	5,210	5,100	1,000		800	3,390	2,370
60–64	3,740	5,780	3,490	1,170	2,940	1,560		1,900
65 and over	4,060	4,160	4,580	1,300	2,930	2,860	5,420	1,620
Total	*3,160*	*3,950*	*4,770*	*740*	*2,470*	*1,540*	*2,430*	*2,160*
PERSONS								
15–19	1,870	*	*	630	320	310	570	1,700
20–24	4,100	5,490	5,280	650	1,990	1,920	1,950	3,650
25–34	5,560	7,030	5,630	290		1,570	2,310	4,440
35–44	5,750	7,560	6,390	470	*	1,830	2,310	4,820
45–54	5,960	7,610	5,740	630	3,510	2,490	3,050	5,070
55–59	5,700	6,490	5,390	1,100	*	1,560	5,440	4,500
60–64	5,990	8,120	5,240	1,260	4,690	2,100		4,010
65 and over	5,280	6,730	5,110	1,340	4,030	3,490	5,280	2,140
Total	**4,990**	**7,180**	**5,770**	**870**	**3,690**	**2,220**	**2,870**	**3,980**

(*a*) Non-institutional population aged 15 years and over. (*b*) For definitions *see* page 288.
* Based on a figure of less than 4,000. *See* comment on standard errors, page 289.

Weekly earnings of employees (distribution), August 1975

In August 1975 a survey, based on the quarterly population survey (*see* the chapter Employment and Unemployment), was conducted throughout Australia in order to obtain information about weekly earnings of all persons aged 15 years and over who were employed as wage or salary earners in their main job. The survey was based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc.) and covered about two-thirds of one per cent of the population of Australia.

Two tables on weekly wage and salary earners are presented below. Additional details may be obtained from the publication *Weekly Earnings of Employees (Distribution), August* 1975 (6.51).

In many cases the answer to the question on earnings was based on the knowledge of one person, generally the housewife. Some understatement in the estimates may be expected because of imperfect recall of minor or irregular sources of earnings.

Definitions of the terms used in the tables are as follows:

Weekly earnings refers to gross weekly wages and salaries from all jobs (i.e. before taxation and other deductions have been made). For persons paid other than weekly, earnings were converted to a weekly equivalent.

Median weekly earnings is the amount which divides the distribution of individuals into two equal groups, one having earnings above the median and the other having earnings below it. Medians were calculated from grouped data with linear interpolation being used within the class interval in which the median fell.

Mean weekly earnings is the amount obtained by dividing the total earnings of a group by the number of units in that group.

Hours worked refers to actual hours worked during the survey week, not necessarily hours paid for. Thus, if a person had been on leave for the whole week, hours would have been recorded as nil.

Full-time workers are those who *usually* work 35 hours a week or more and others who, although usually part-time workers, worked 35 hours or more during the survey week.

Part-time workers are those who usually work less than 35 hours a week and who did so during the survey week. When recording hours of work, fractions of an hour were disregarded.

Standard errors. Since the estimates are based on a sample they are subject to sampling variability. The following table, while not giving a precise measure of the standard error of a particular estimate, does provide an indication of its magnitude.

APPROXIMATE STANDARD ERRORS OF ESTIMATES

Size of estimate (Persons)	*Approximate standard error of estimates*		*Size of estimate (Persons)*	*Approximate standard error of estimates*	
	Persons	*Per cent of estimate*		*Persons*	*Per cent of estimate*
4,000 . .	800	20.0	100,000	3,000	3.0
5,000 . .	900	18.0	200,000	4,000	2.0
10,000 . .	1,200	12.0	500,000	6,000	1.2
20,000 . .	1,600	8.0	1,000,000	8,000	0.8
50,000 . .	2,300	4.6	2,000,000	10,000	0.5

Estimates less than 4,000 have not been shown in the tables as they would be subject to such high standard errors as to detract seriously from their value for most reasonable uses.

ALL EMPLOYEES(*a*): WEEKLY EARNINGS(*b*) AND HOURS WORKED, AUGUST 1975

Weekly earnings (b) ($)	*Hours worked (c)*									
	0(c)	*1–19*	*20–29*	*30–34*	*35–39*	*40*	*41–44*	*45–48*	*49 and over*	*Total*
MALES										
					—'000—					
Under 20	6.2	31.8	4.6	*	*	*	*	4.1	6.7	42.8
20 and under 40		20.8		*	*	*	*			34.6
40 ,, ,, 60		7.5	5.6	4.0	5.0	40.6	*		5.7	76.3
60 ,, ,, 80	4.1	4.6	7.3	4.5	9.9	50.8	4.9	*	8.9	98.4
80 ,, ,, 100	10.2	*	7.2	9.6	17.6	97.6	7.8	10.4	11.4	173.9
100 ,, ,, 110	13.5	4.1	4.8	12.7	16.6	150.5	11.1	14.6	18.0	245.8
110 ,, ,, 120	20.5	*	*	12.3	20.0	178.9	15.7	13.8	17.6	285.5
120 ,, ,, 130	19.6	4.9	7.6	13.4	31.3	206.2	18.9	25.6	21.8	349.6
130 ,, ,, 140	16.2	6.1	*	11.3	28.6	171.8	21.2	22.4	21.9	300.3
140 ,, ,, 150	17.2		5.7	7.8	33.3	125.0	15.4	26.5	26.2	260.1
150 ,, ,, 160	15.3	*	5.1	7.6	34.2	117.7	12.5	25.4	34.5	253.9
160 ,, ,, 200	34.8	4.6	9.0	13.0	79.3	180.3	29.9	55.1	86.9	492.8
200 ,, ,, 260	24.6	5.8	7.5	7.9	62.2	91.4	16.6	42.2	83.6	338.5
260 and over	15.5		*	*	29.1	36.9	7.2	19.3	59.3	176.8
Total	*197.7*	*96.9*	*74.2*	*110.3*	*369.2*	*1,451.4*	*164.0*	*262.7*	*402.5*	*3,129.4*
					—dollars—					
Median earnings	144	35	124	127	155	129	139	153	170	138
Mean earnings	159	69	130	136	167	138	152	166	185	149
FEMALES										
					—'000—					
Under 20	7.6	77.0	*	*	*	*	*	4.6	5.8	89.2
20 and under 40	9.7	73.7	6.9	*	*	*	*			98.1
40 ,, ,, 60	9.2	59.6	31.7	5.0	12.7	33.5	4.6			159.3
60 ,, ,, 80	11.3	25.2	55.1	18.0	26.0	63.3	*			207.6
80 ,, ,, 100	18.2	10.9	30.4	31.0	41.9	137.3	9.4	5.0	6.4	287.3
100 ,, ,, 110	12.5	4.6	8.4	21.7	43.0	120.7	8.1	4.0		226.1
110 ,, ,, 120	10.6	4.6	5.0	13.9	41.8	87.6	8.7	4.2	5.4	176.4
120 ,, ,, 130	10.2		4.1	9.9	52.7	60.3	6.1	4.4		153.2
130 ,, ,, 140	8.6	4.8	7.5	5.9	33.4	37.3	*	*	4.1	101.3
140 ,, ,, 160	11.0			6.3	34.2	37.6	4.0	6.7	4.2	109.4
160 ,, ,, 200	11.8		4.5	4.2	23.0	23.3	5.1	5.0	7.2	81.7
200 ,, ,, 260	5.0	*		*	8.4	6.4			5.9	29.8
260 and over		*	*	*	*	*	*	*		9.4
Total	*125.6*	*260.7*	*155.3*	*122.1*	*321.5*	*613.1*	*53.6*	*37.9*	*39.0*	*1,728.7*
					—dollars—					
Median earnings	105	34	73	102	118	105	110	122	134	101
Mean earnings	105	40	79	105	119	107	114	124	142	98
PERSONS										
					—'000—					
Under 20	9.7	108.8	*	4.7	4.9	*	*	5.9	*	132.0
20 and under 40	10.9	94.5	9.3			5.4	*		4.5	132.7
40 ,, ,, 60	12.2	67.1	37.3	9.0	17.6	74.1	6.8		7.8	235.6
60 ,, ,, 80	15.4	29.8	62.4	22.6	35.9	114.1	8.7	6.2	10.9	306.1
80 ,, ,, 100	28.3	13.2	37.6	40.5	59.5	234.8	17.3	15.4	14.6	461 1
100 ,, ,, 110	26.0	8.7	13.2	34.4	59.5	271.2	19.2	18.5	21.2	471.9
110 ,, ,, 120	31.1	4.8	8.9	26.2	61.8	266.4	24.4	18.0	20.1	461.8
120 ,, ,, 130	29.8	7.5	11.7	23.3	84.0	266.5	25.0	30.0	24.7	502.8
130 ,, ,, 140	24.8	5.3	7.3	17.2	62.0	209.1	24.0	26.0	26.0	401.7
140 ,, ,, 150	23.8	3.6	7.5	11.3	52.2	145.8	18.5	30.0	28.1	320.8
150 ,, ,, 160	19.8	2.3	7.1	10.4	49.5	134.6	13.4	28.7	36.9	302.6
160 ,, ,, 200	46.5	5.8	12.6	17.3	102.2	203.6	33.7	58.6	94.1	574.5
200 ,, ,, 260	28.4	6.2	8.4	11.3	70.6	97.8	17.8	43.7	87.2	368.3
260 and over	16.6		*	4.3	30.9	39.5	7.8	19.7	61.6	186.2
Total	**323.3**	**357.5**	**229.4**	**232.4**	**690.7**	**2.064.6**	**217.6**	**300.6**	**441.5**	**4,858.0**
						—dollars—				
Median earnings	129	34	81	111	133	122	132	150	167	124
Mean earnings	138	48	96	120	145	129	142	161	181	131

(*a*) Civilian non-institutional population aged 15 years and over. (*b*) For definitions *see* page 295. (*c*) Includes persons paid while on leave, etc. * Less than 4,000. *See* comment on standard errors, page 295.

FULL-TIME EMPLOYEES(*a*): WEEKLY EARNINGS(*b*) AND AGE, AUGUST 1975

Weekly earnings(b) ($)	*Age group (years)* 15–19	20–24	25–34	35–44	45–54	55–59	60–64	65 and over	*Total*
MALES									
					—'000—				
Under 40	5.5	5.2	5.2	4.6	4.6	*	*	6.1	17.3
40 and under 60	54.1					*	*		64.8
60 ,, ,, 80	71.4	7.5	4.1		*	*	*		90.9
80 ,, ,, 100	64.2	38.9	16.3	15.1	17.1	7.0	6.7		168.5
100 ,, ,, 110	28.4	51.7	48.7	34.1	43.4	17.7	13.2	4.4	241.6
110 ,, ,, 120	16.2	54.4	65.8	50.9	54.9	18.4	19.3	7.6	283.6
120 ,, ,, 130	9.9	63.2	89.3	63.5	69.0	26.3	21.2		346.3
130 ,, ,, 140	5.2	49.3	84.6	56.1	58.3	24.4	17.6	4.7	298.3
140 ,, ,, 150	4.8	38.8	74.8	52.4	49.8	21.0	15.5		259.0
150 ,, ,, 160	4.9	38.8	79.1	52.1	49.0	19.9	8.1	4.2	252.1
160 ,, ,, 170		25.0	61.5	33.3	31.2	12.5	5.6		170.9
170 ,, ,, 180		12.9	40.8	27.8	22.6	7.0	5.3		118.1
180 ,, ,, 190	*	11.4	41.1	26.0	22.1	7.3	5.3		112.4
190 ,, ,, 200	*	5.8	32.8	20.1	17.2	6.9		*	85.8
200 ,, ,, 220	*	9.8	56.6	43.4	37.0	8.1	6.3	*	159.7
220 ,, ,, 240	*	*	32.4	23.0	18.4	5.3		*	86.6
240 ,, ,, 260	*	4.8	30.1	23.3	20.6	4.8	5.4	*	86.2
260 ,, ,, 300	*	4.6	18.9	24.4	19.4	6.3		*	74.4
300 ,, ,, 340	*		10.2	16.5	13.8	*		*	46.3
340 and over	*	*	13.0	14.0	16.6	6.6	*	*	53.9
Total	**268.4**	**426.4**	**805.1**	**580.8**	**567.2**	**205.3**	**134.0**	**29.1**	**3,016.6**
					—dollars—				
Median earnings	80	128	151	152	146	142	132	133	139
Mean earnings	85	135	164	170	165	159	145	126	152
FEMALES									
					—'000—				
Under 60	54.7	*	4.1	4.5	*	*		(c) *	72.8
60 and under 80	81.2	8.9	7.5	6.9	5.6	*		*	112.5
80 ,, ,, 100	61.7	46.3	30.3	40.0	35.6	7.4		4.9	226.1
100 ,, ,, 110	15.3	60.5	39.9	35.7	37.7	7.4		5.1	201.6
110 ,, ,, 120	7.1	51.1	35.2	28.3	27.8	6.9		4.1	160.4
120 ,, ,, 130	5.0	45.3	39.6	21.3	25.9	5.6		4.3	144.1
130 ,, ,, 140	5.1	21.7	30.5	17.2	14.4	6.0			94.8
140 ,, ,, 150		13.5	18.0	10.8	8.7	4.2			56.6
150 ,, ,, 160		14.6	11.7	7.9	6.9	7.0		5.1	44.5
160 ,, ,, 170	*	5.8	8.8	4.9	4.1				25.7
170 ,, ,, 180	*	5.1	6.5	6.4					18.3
180 ,, ,, 190	*	5.4	5.5		4.2				15.5
190 ,, ,, 200	*		*	*	*				13.2
200 and over	*	*	13.1	7.1	6.5				34.9
Total	**231.9**	**283.3**	**254.1**	**194.3**	**182.9**	**47.3**		**27.3**	**1,221.0**
					—dollars—				
Median earnings	75	114	122	113	113	118		110	109
Mean earnings	78	118	128	121	120	124		120	113

(*a*) Civilian non-institutional population aged 15 years and over. (*b*) For definitions *see* page 295. (*c*) Aged 60 years and over.
* Less than 4,000. *See* comment on standard errors, page 295.

Determination of wage rates in Australia

Legal minimum wage rates in Australia are generally prescribed in awards or determinations of Federal and State industrial arbitration tribunals, in collective agreements registered with these tribunals, or in unregistered collective agreements. A list of the main industrial tribunals operating in Australia is shown in *Labour Report* No. 58, 1973.

In awards, etc. of State tribunals in all States except Victoria and South Australia the wage rates specified for particular occupations consist of a basic wage and secondary wage payments. A basic wage is prescribed separately for adult males and adult females and is a common component of prescribed rates of pay in an award. In addition to the basic wage are margins for skill, etc. for particular occupations and these together with loadings of various kinds peculiar to the occupation or industry make up the secondary wage. The division of award rates into basic wage and secondary wage also applied to awards, etc. of the Commonwealth Conciliation and Arbitration Commission and of Victorian Wages Boards prior to 1 July 1967. However, as a result of the decision of the Commission in the National Wage Cases of 1967 and a subsequent decision of the Victorian Industrial Appeals Court, basic wages and margins were eliminated from Federal awards and Victorian Wages Board determinations, and award, etc. rates of pay were expressed as total wages. From 4 September 1975 award rates in South Australian State awards were also expressed as total wages.

In July 1966 the Commonwealth Conciliation and Arbitration Commission inserted rates of minimum wage for adult males into Federal awards. This decision has been followed by State tribunals so that now in most State and Federal awards, etc., where applicable, rates of minimum wage for adult males are prescribed. The awards in general state that no adult male employee shall be paid less than the minimum wage for working the standard weekly hours of work. The concept of a minimum wage has also been extended to adult females covered by Federal and State awards. For further information on minimum wages for adult males and adult females *see* page 270–1.

The following paragraphs set out recent decisions by Federal and State industrial tribunals affecting award, etc. rates of pay. For further information including a history of wage determination in Australia reference should be made to the *Labour Report*. Section VIII of the Appendix of *Labour Report* No. 58, 1973 contains tables of basic wages, minimum wages, and general increases in award total wage. Current information on basic wages, minimum wages and increases in total wages may be obtained from the monthly bulletin *Wage Rates and Earnings* (6.16). Also included in this chapter are brief summaries of the provision of paid annual leave and paid long service leave to employees. These provisions have been made by decisions of Federal and State industrial arbitration authorities or by legislation.

Total wages in Federal awards

Following the National Wage Cases of 1967, the Commonwealth Conciliation and Arbitration Commission announced the introduction of the total wage concept to cover Federal awards. Subsequently, as a result of National Wage Cases, the Commission made annual adjustments to total award wages in the years 1968 to 1974, but excluding 1970. In its judgment in the May 1974 National Wage Case, the Commission stated that it would call a conference to discuss wage fixation methods and wage indexation.

On 30 April 1975, following a National Wage Case, the Commission decided to introduce wage indexation in the form of quarterly adjustments to award total wages based on increases in the Consumer Price Index (C.P.I.). The increases would apply to all ordinary award rates and rates for leading hands and would operate from the beginning of the first pay-period commencing on or after the 15th day of the month following release of the quarterly C.P.I. The Commission also announced that each year it would consider what increase in total wage should be awarded on account of productivity.

As a result of indexation claims, total wages under Federal awards were increased by 3.6 per cent in May 1975, 3.5 per cent in September 1975 and 6.4 per cent in February 1976. The changes were operative from the beginning of the first pay-period commencing on or after 15 May 1975, 18 September 1975 and 15 February 1976 respectively.

Minimum wage for adult males and adult females

In July 1966 the Commonwealth Conciliation and Arbitration Commission, in its decisions in the Basic Wage, Margins and Total Wage Cases of 1966, inserted in Federal awards provisions for a minimum wage for adult males. For further information on this decision *see* Year Book No. 60, 1974.

The first Federal minimum wage for adult males operated from the beginning of the first pay-period commencing on or after 11 July 1966. The rates of minimum wage for adult males in State capital cities inserted in awards ranged from $34.75 (Brisbane) to $37.25 a week (Sydney).

As a result of decisions of the Commission in National Wage Cases, the minimum wages for adult males were increased each year from 1967 to 1974 (except 1970). Further increases were awarded in January 1975 ($8 a week), May 1975 ($4) and September 1975 ($2.80).

In its decision in the 1974 National Wage Case, the Commonwealth Conciliation and Arbitration Commission extended the minimum wage to adult females in three stages. Initially the minimum wage for adult females was to be 85 per cent of the relevant adult male minimum wage, increasing to 90 per cent by 30 September 1974 and to 100 per cent by 30 June 1975.

Industrial tribunals in all States have adopted the concept of a minimum wage for adult males and adult females covered by State awards, determinations and agreements. The timing adopted by the various States in extending this principle to both adult males and females is given in the Year Book No. 60, 1974. In all States except Western Australia, the minimum wage for adult males and females came into equality from about the end of June 1975.

Equal pay

The Commonwealth Conciliation and Arbitration Commission, in its decision in the National Wage and Equal Pay Cases 1972, outlined the principle of 'equal pay for work of equal value' for adult and junior females to be applied to all Federal awards and determinations. For further details *see* Year Book No. 60, 1974.

Determination of wage rates in State awards, etc.

The following paragraphs set out recent decisions of State industrial arbitration tribunals affecting rates of pay prescribed in State awards, etc. For further information including a history of wage determination in Australia, reference should be made to *Labour Reports* and earlier issues of the Year Book. Tables of basic wages, minimum wages and general increases in total wages were published in the Appendix to *Labour Report* No. 58, 1973. Current figures appear in the monthly bulletin *Wage Rates and Earnings* (6.16).

New South Wales

Since January 1968 the Industrial Commission of New South Wales has granted increases in award rates of pay to employees under State awards, etc. similar in amount to those awarded to Federal award employees as a result of National Wage Cases. The increases to State awards were made through increases in basic wages and margins.

It was not till May 1974 that the concept of a minimum wage for adult males and a minimum wage for adult females was generally adopted for State awards.

Following the May 1975 National Wage Case decision the Industrial Commission of New South Wales decided to increase State award wages by 3.6 per cent. This increase was inclusive of an increase of $1.70 a week in the basic wage which became $49.50 a week for adult males and $40.20 a week for adult females. The minimum wage for adult males and adult females was set at $80.80 and $72.70 a week respectively. All variations operated from the beginning of the first pay-period commencing on or after 15 May 1975. Similarly from the beginning of the first pay period commencing on or after 18 September 1975, when State award wages were increased by 3.5 per cent, the basic wage rose to $51.20 a week for adult males and $41.90 for adult females. From the same date the weekly minimum wage increased by $2.80 to $83.60 for both adult males and females.

As from the beginning of the pay-period in which 30 June 1975 occurred, the adult female minimum wage rate reached full parity with the adult male rate of $80.80 a week.

Victoria

Since July 1967 wage rates in Victorian Wages Board determinations have been expressed as total wages as in Federal awards. (*see* page 298).

Following decisions of the Commonwealth Conciliation and Arbitration Commission in National Wage Cases, total wages prescribed for adult males and adult females in Wages Board determinations have been increased by similar amounts to those awarded to Federal award employees.

In December 1969 the Industrial Appeals Court ordered that a minimum wage for adult males should operate in all Wages Board determinations. Since then this wage has been increased by the same amount of increase as prescribed for the Federal minimum wage for adult males. (*see* page 298).

From the beginning of the first pay-periods commencing on or after 15 May and 18 September 1975, total wages in Victoria Wages Board determinations were increased by 3.6 and 3.5 per cent respectively. At the same time minimum wage rates rose in May to $80.00 a week for adult males and $72.00 for adult females and in September to $82.80 for both adult males and adult females.

As from the beginning of the pay-period in which 30 June 1975 occurred, the minimum wage for adult females reached full parity with the adult male rate of $80.00 a week.

Queensland

The Industrial Conciliation and Arbitration Commission of Queensland has in recent years considered applications to increase wage rates prescribed in State awards subsequent to the publication of retail price index numbers or to decisions in the National Wage Cases. (*see* page 298). Details of changes in State award wage rates to February 1973 will be found in earlier issues of the Year Book and the *Labour Report*.

In May 1970 the Industrial Commission declared that a guaranteed minimum wage for adult males would be prescribed in all awards and industrial agreements. Since then there have been a number of increases made to the minimum wage.

From 22 September 1975, the Industrial Commission increased the basic wage to $56.30 a week for adult males and $44.05 for adult females. Prior to this date increases had also been made on 2 September 1974 and 26 May 1975. The rates given above are operative in the Southern Division—Eastern District (including Brisbane) only. For other areas of the State, district allowances are added. For details *see Labour Report* No. 58, 1973.

Since 27 May 1974 when the minimum wage for adult males stood at $68.50 a week, the Commission has granted five increases, i.e. 2 September 1974, 6 January 1975, 28 April 1975, 26 May 1975 and 22 September 1975 when the rate for both adult males and adult females became $83.30 a week.

South Australia

Following increases in rates of pay in Federal awards as a result of National Wage Cases (*see* page 298), the South Australian Industrial Commission granted increases in rates prescribed in State awards.

A minimum wage for adult males was introduced into State awards in September 1966. Since then increases to this wage have been the same as those granted to the Federal minimum wage to adult males (*see* pages 298–9).

The first pay-period commencing on or after 15 May 1975 was the last occasion on which the State living wage was varied to become $48.20 a week for adult males and $38.60 a week for adult females. From 4 September 1975 the living wage and margins were deleted from State awards and rates were specified as total wages. These were subsequently increased by 3.5 per cent operative from the beginning of the first-pay period commencing on or after 22 September 1975.

The minimum wage operative from the same period in September 1975 was $82.40 for both adult males and females.

From the beginning of the pay-period in which 30 June 1975 occurred, the minimum wage for both adult males and adult females became $79.60 a week.

Western Australia

Since November 1968 legislation has provided that the Western Australian Industrial Commission should review and vary the basic wage once every twelve months unless there are special reasons.

In April 1967 the Industrial Commission first included in State awards provision for a minimum wage for adult males. Increases have since been granted to the minimum wage.

Beginning in October 1970 wage rates for adult males in State awards have been increased so that the rates for ordinary hours of work are 110 per cent of the sum of the specified basic wage and margin. This provision does not apply to adult males in receipt of this allowance through award provisions or otherwise.

The Industrial Commission increased the basic wage plus margin in State awards by 3.6 per cent from 15 May 1975 and 3.5 per cent from 15 August 1975.

From the beginning of the first pay-period commencing on or after 1 May 1975, the minimum wage was increased to $82.50 a week for adult males and $72.10 for adult females.

As from the beginning of the first pay-period commencing on or after 30 June 1975, the State minimum wage for adult females was increased to $80.10 a week, the same rate as then operating under Federal awards.

Tasmania

Subsequent to decisions of the Commonwealth Conciliation and Arbitration Commission in National Wage Cases (*see* page 298), Tasmanian Wages Boards have increased wage rates prescribed in their determinations.

A minimum wage for adult males was introduced into Wages Board determinations in July 1967 and increases have been made to the minimum wage since then.

State Wages Board determinations were varied as follows from the beginning of the first pay-period commencing on or after 15 May 1975. The basic wage was increased by $1.70 a week to $47.70 for adult males and by $1.30 to $38.20 for adult females with the minimum wage rising to $80.70 for adult males and $72.60 for adult females.

The basic wage and minimum wage for both adult males and adult females were further increased to $50.00 a week and $83.50 a week respectively, operative from the beginning of the first pay-period commencing on or after 18 September 1975.

From the beginning of the pay-period in which 30 June 1975 occurred, the adult female minimum wage reached full parity with the adult male rate of $80.70 a week.

Annual leave

The majority of employees in Australia at present receive at least four weeks paid annual leave.

State Government employees in New South Wales and South Australia were granted four weeks paid annual leave in 1964 and 1971 respectively and Australian Government employees gained the benefit in January 1973. Following the increase in the entitlement for Australian Government employees, State Government employees in Victoria, Queensland and Western Australia were granted four weeks leave from the same date, while Tasmanian State Government employees received the entitlement from October 1972.

In December 1973 Queensland day workers employed under State awards were granted four weeks paid annual leave. Subsequently, workers employed under State awards and determinations in other States received similar benefits.

On 2 May 1974, the Australian Conciliation and Arbitration Commission granted four weeks paid annual leave to persons employed under the Metal Industry Award. This was the first major Federal award to prescribe four weeks paid leave with the entitlement accruing from 1 January 1974. Upon application four weeks annual leave was subsequently extended to other Federal awards.

In addition to four weeks annual leave on full pay, many Australian workers receive an annual leave bonus. This bonus varies in amount, but a 17½ per cent addition to the leave pay is a common provision in awards, etc.

More detailed information on Federal and State annual leave provisions appears in the *Labour Report*.

Long service leave

Paid long service leave, i.e. leave granted to workers who remain with the one employer over an extended period of time, has been included in the provisions of Federal and State industrial legislation and industrial awards. Most employees in Australia are now entitled to at least thirteen weeks paid long service leave after fifteen years continuous employment with the one employer. For employees in certain industries and for some employees of the Australian and State governments, long service leave entitlements are more generous. In all cases the transfer of ownership of a business does not constitute a break in continuity of service with the same employer. Further information is contained in the *Labour Report*.

INDUSTRIAL DISPUTES

Detailed information, including explanatory notes, definitions, etc., on industrial disputes involving stoppages of work is given in the *Labour Report*. A table showing statistics of industrial disputes for each year from 1913 is contained in the Appendix to *Labour Report* No. 58, 1973. Current statistics are published in the quarterly bulletin *Industrial Disputes* (6.6). Preliminary monthly figures are published in the statement *Industrial Disputes* (6.27).

The statistics of industrial disputes are now compiled according to the Australian Standard Industrial Classification (ASIC), described in the Bureau publication *Australian Standard Industrial Classification* (*Preliminary Edition*), 1969, Vol. I. Statistics on this basis for the years 1969 to 1973 were published in *Labour Report* No. 58, 1973.

Particulars of all disputes in progress during the year are included in the annual figures, whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently, details of 'the number of disputes' and 'workers involved' in disputes which commenced in any year, and were still in progress during the following year, are included in the figures for both years.

The following table gives, for Australia as a whole, particulars of industrial disputes which were in progress during 1975, classified according to industries.

INDUSTRIAL DISPUTES(*a*): INDUSTRIES, AUSTRALIA, 1975

ASIC division (b)	*ASIC industry (b)*	*Number of disputes*	*Workers involved ('000)*			*Working days lost ('000)*	*Estimated loss in wages ($'000)*
			Directly	*Indirectly (c)*	*Total*		
A	Agriculture, forestry, fishing and hunting	3	6.0	..	6.0	3.8	129.6
B	Mining—						
	Coal mining	175	48.4	1.1	49.5	343.3	11,456.5
	Other mining (*d*)	188	26.7	6.3	33.0	90.0	2,807.6
	Total mining	*365*	*75.1*	*7.4*	*82.5*	*433.3*	*14,264.1*
C	Manufacturing—						
	Food, beverages and tobacco	170	72.7	21.8	94.5	253.2	6,215.7
	Textiles; clothing and footwear—						
	Textiles	13	17.3	0.1	17.3	20.7	327.1
	Clothing and footwear	4	0.8	*	0.8	1.9	42.2
	Total textiles; clothing and footwear	*17*	*18.1*	*0.1*	*18.1*	*22.6*	*369.3*
	Wood, wood products and furniture	23	6.8	0.2	7.0	13.0	324.6
	Paper and paper products, printing and publishing	56	42.7	1.0	43.7	63.8	2,096.7
	Chemical, petroleum and coal products	49	10.9	0.8	11.7	34.5	797.8
	Metal products, machinery and equipment—						
	Basic metal products	195	45.6	1.6	47.2	98.6	2,703.4
	Fabricated metal products	162	64.7	0.9	65.6	105.7	2,423.7
	Transport equipment	226	112.9	3.2	116.2	178.9	4,589.2
	Other machinery and equipment	93	15.2	2.5	17.6	128.6	3,404.3
	Total metal products, machinery and equipment (e)	*681*	*544.4*	*9.1*	*553.5*	*1,279.2*	*33,073.1*
	Other manufacturing—						
	Non-metallic mineral products (*f*)	56	9.0	1.7	10.6	47.0	1,246.6
	Miscellaneous manufacturing (*g*)	17	4.9	*	4.9	30.0	777.1
	Total other manufacturing	*73*	*13.7*	*1.8*	*15.5*	*77.0*	*2,023.3*
	Total manufacturing	*1,069*	*709.1*	*34.8*	*744.0*	*1,743.3*	*45,063.3*
D	Electricity, gas and water—						
	Electricity and gas	24	20.0	*	20.0	26.8	747.1
	Water, sewerage and drainage	10	14.8	..	14.8	226.5	6,416.0
	Total electricity, gas and water	*34*	*34.8*	*	*34.8*	*253.4*	*7,163.1*
E	Construction	309	156.4	2.0	158.4	497.0	14,860.6
F	Wholesale and retail trade—						
	Wholesale trade	21	30.8	0.4	31.2	109.0	2,810.2
	Retail trade	25	7.5	0.2	7.7	94.3	2,256.7
	Total wholesale and retail trade	*46*	*38.2*	*0.6*	*38.9*	*203.3*	*5,066.9*

For footnotes *see* page 303.

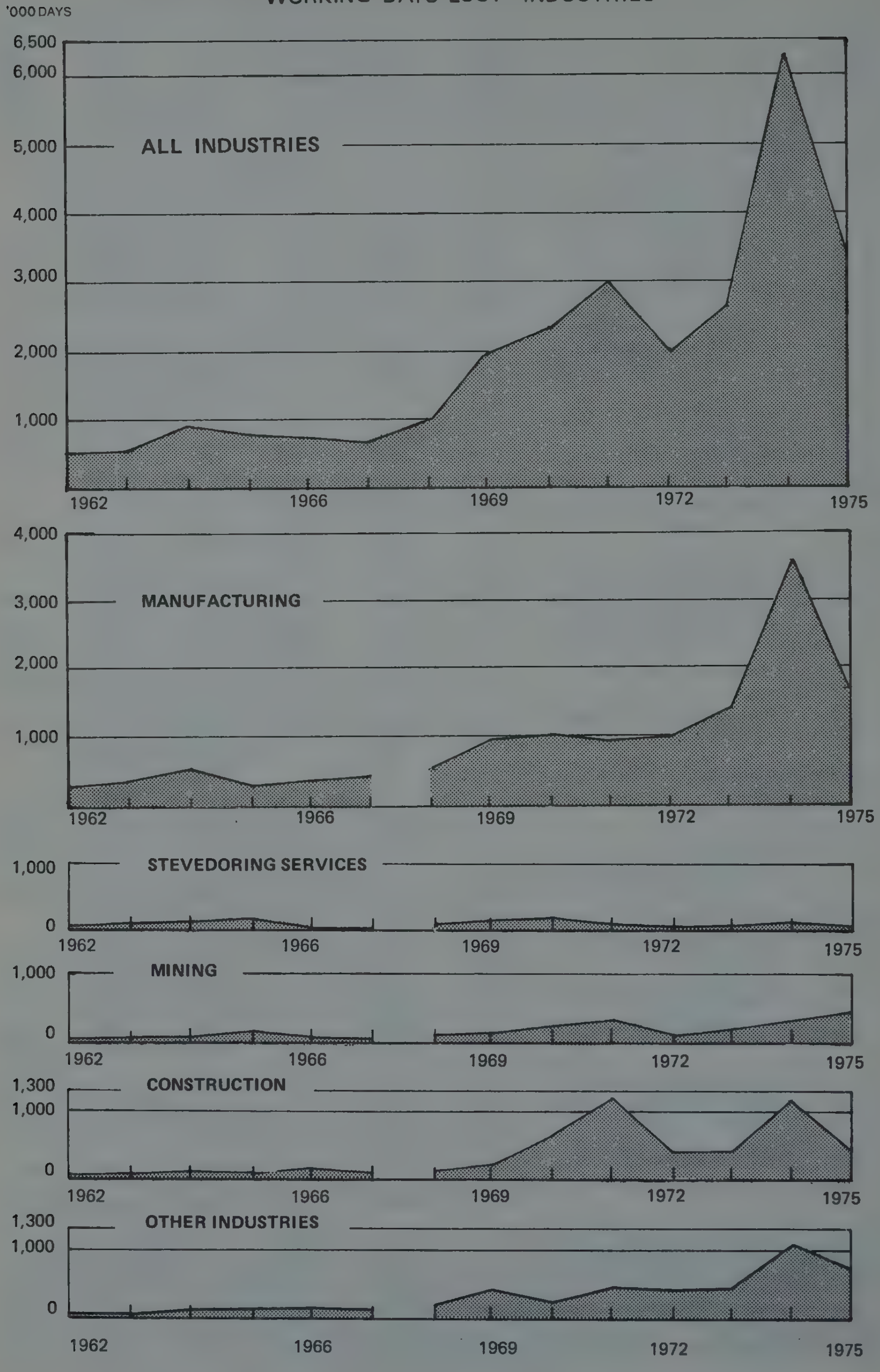
INDUSTRIAL DISPUTES(*a*): INDUSTRIES, AUSTRALIA, 1975—*continued*

ASIC division (b)	*ASIC industry (b)*	*Number of disputes*	*Workers involved ('000)*			*Working days lost ('000)*	*Estimated loss in wages ($'000)*
			Directly	*Indirectly (c)*	*Total*		
G,H	Transport and storage; communication—						
	Road transport; other transport and storage; communication—						
	Road transport	34	31.4	0.2	31.6	37.8	932.4
	Other transport and storage; communication	19	4.2	0.1	4.2	7.4	211.5
	Total road transport; other transport and storage; communication	*53*	*35.4*	*0.4*	*35.9*	*45.3*	*1,143.9*
	Railway transport; air transport—						
	Railway transport	44	68.4	7.8	76.3	78.0	1,897.3
	Air transport	12	3.3	..	3.3	5.6	153.1
	Total railway transport; air transport	*56*	*71.7*	*7.8*	*79.5*	*83.6*	*2,050.4*
	Water transport—						
	Stevedoring services	279	46.3	0.7	46.9	46.2	1,180.9
	Water transport (except stevedoring services)	74	9.9	0.2	10.1	17.9	542.5
	Total water transport	*353*	*56.2*	*0.9*	*57.0*	*64.0*	*1,723.4*
	Total transport and storage; communication	*462*	*163.3*	*9.1*	*172.4*	*192.9*	*4,917.7*
L	Entertainment, recreation, restaurants, hotels and personal services	21	21.2	..	21.3	13.7	324.9
I	Other industries—						
	Finance, insurance, real estate and business services	25	36.3	..	36.3	14.0	276.7
J,K	Public administration and defence; community services—						
	Health	16	38.7	..	38.7	62.4	1,290.4
	Education, libraries, museums and art galleries	32	38.7	..	38.7	45.0	1,250.9
	Other (*h*)	52	25.9	0.1	26.0	48.0	1,152.6
	Total public administration and defence; community services	*100*	*103.3*	0.1	*103.4*	*155.4*	*3,693.9*
	Total other industries	*125*	*139.5*	0.1	*139.7*	*169.4*	*3,970.7*
	Total	**2,432**	**1,343.8**	**54.1**	**1,398.0**	**3,509.9**	**95,760.7**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Australian Standard Industrial Classification, *see* page 301. Statistics in this industry detail are available from the year 1973. (*c*) Persons thrown out of work at the establishments where the stoppages occurred but who are not themselves parties to the dispute. (*d*) Includes ASIC sub-divisions 11, 13, 14, 15, 16. (*e*) Sub-total includes details of large disputes that cannot be allocated to the appropriate sub-divisions. Details for the sub-divisions therefore do not add to this sub-total. (*f*) Glass, clay and other non-metallic mineral products (ASIC sub-division 28). (*g*) Leather, rubber and plastic products and manufacturing n.e.c. (ASIC sub-division 34). (*h*) Includes public administration and defence (ASIC division J); welfare and charitable services and religious institutions (ASIC sub-division 83), and other community services (ASIC sub-division 84). * Less than 50.

INDUSTRIAL DISPUTES: AUSTRALIA

WORKING DAYS LOST–INDUSTRIES



NOTE. A break exists in the series between 1967 and 1968, due to adoption of the Australian Standard Industrial Classification (ASIC).

PLATE 34

The following table gives particulars of the number of industrial disputes in each State and Territory, together with the number of workers involved and the losses in working days and wages caused by disputes which were current during each of the years 1971 to 1975.

INDUSTRIAL DISPUTES(*a*): STATES AND TERRITORIES, 1971 TO 1975

State or Territory	*Year*	*Number*	*Workers involved* ('000) *Directly*	*Workers involved* ('000) *Indirectly* (*b*)	*Workers involved* ('000) *Total*	*Working days lost* ('000)	*Estimated loss in wages* ($'000)
New South Wales	1971	1,236	613.1	30.6	643.7	1,887.5	28,218.2
	1972	1,174	509.2	6.9	516.1	866.8	13,957.2
	1973	1,299	370.8	16.7	387.5	1,098.1	18,775.2
	1974	1,427	865.3	28.3	893.6	2,665.0	54,590.3
	1975	1,053	483.4	13.0	496.4	1,477.8	41,150.3
Victoria	1971	362	366.5	13.5	380.1	689.6	9,726.5
	1972	377	292.0	46.2	338.2	638.4	9,656.0
	1973	431	172.5	17.3	189.8	780.5	13,223.4
	1974	476	597.2	13.8	611.0	2,386.6	46,905.3
	1975	424	549.7	21.2	570.9	1,221.7	31,896.8
Queensland	1971	441	167.9	4.3	172.2	271.4	4,009.1
	1972	442	146.3	10.2	156.5	292.2	4,973.4
	1973	378	92.3	4.6	97.0	320.2	5,476.2
	1974	312	137.2	4.0	141.2	529.5	12,023.6
	1975	412	165.2	7.5	172.7	473.3	13,498.5
South Australia	1971	135	59.3	4.8	64.1	111.2	1,484.9
	1972	111	48.2	1.7	49.8	60.9	858.0
	1973	159	55.4	1.5	56.9	130.6	2,144.0
	1974	180	109.7	6.6	116.3	316.5	6,105.1
	1975	194	65.7	3.9	69.6	127.6	3,168.2
Western Australia	1971	132	30.8	5.0	35.8	69.4	1,166.4
	1972	105	24.2	4.1	28.3	94.6	1,677.2
	1973	160	35.4	2.2	37.6	117.3	2,422.3
	1974	257	186.1	2.1	188.1	256.9	5,827.7
	1975	236	47.5	6.3	53.8	100.7	3,075.2
Tasmania	1971	46	14.1	0.5	14.7	20.6	317.3
	1972	48	11.7	3.5	15.2	19.2	305.1
	1973	63	15.3	2.2	17.5	140.1	2,322.4
	1974	79	31.1	2.6	33.6	88.5	1,800.9
	1975	57	18.2	1.8	20.1	40.6	1,007.5
Northern Territory	1971	41	9.5	0.1	9.6	15.7	271.4
	1972	32	3.4	*	3.5	15.1	267.1
	1973	31	5.5	..	5.5	18.9	361.2
	1974	52	5.5	0.4	5.9	18.9	485.2
	1975	37	9.5	0.4	9.9	33.4	878.4
Australian Capital Territory	1971	11	6.3	..	6.3	3.3	47.4
	1972	9	6.2	*	6.2	23.1	380.4
	1973	17	10.7	0.4	11.1	29.0	481.8
	1974	26	15.0	0.1	15.1	30.4	563.7
	1975	19	4.5	..	4.5	34.9	1,085.9
Australia	**1971**	**2,404**	**1,267.7**	**58.8**	**1,326.5**	**3,068.6**	**45,241.3**
	1972	**2,298**	**1,041.2**	**72.6**	**1,113.8**	**2,010.3**	**32,074.4**
	1973	**2,538**	**758.0**	**45.0**	**803.0**	**2,634.7**	**45,206.5**
	1974	**2,809**	**1,947.1**	**57.8**	**2,004.8**	**6,292.5**	**128,301.8**
	1975	**2,432**	**1,343.8**	**54.1**	**1,398.0**	**3,509.9**	**95,760.7**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. (*b*) Persons thrown out of work at the establishments where the stoppages occurred but who are not themselves parties to the dispute.

* Less than 50.

Duration of disputes

The duration of each industrial dispute involving a loss of work, i.e. the time between the cessation and resumption of work, has been calculated in working days, exclusive of Saturdays, Sundays and holidays, except where the establishment involved carries on a continuous process (e.g. metal smelting and cement manufacture).

The following table shows, for the year 1975, industrial disputes classified according to duration in working days.

INDUSTRIAL DISPUTES(*a*): DURATION, AUSTRALIA, 1975

	Mining		*Manufacturing*			*Transport and storage; communication*			
Duration (working days)	*Coal*	*Other*	*Metal products, machinery and equipment (b)*	*Other*	*Construction*	*Stevedoring services*	*Other*	*Other industries*	*All industries*
NUMBER OF DISPUTES									
Up to 1 day . .	93	73	311	120	120	192	78	105	1,092
Over 1 to 2 days . .	43	48	87	54	31	65	39	31	398
Over 2 to 3 days . .	20	24	42	50	27	13	19	27	222
Over 3 to less than 5 days	8	17	70	46	33	4	20	16	214
5 to less than 10 days .	8	19	97	76	53	5	19	35	312
10 to less than 20 days.	2	6	49	39	31	..	5	12	144
20 to less than 40 days.	1	1	23	3	10	..	2	2	42
40 days and over. .	..	..	2	..	4	..	1	1	8
Total	**175**	**188**	**681**	**388**	**309**	**279**	**183**	**229**	**2,432**
WORKERS INVOLVED (DIRECTLY AND INDIRECTLY) ('000)									
Up to 1 day . .	18.6	12.5	161.4	110.6	82.2	33.4	69.4	171.6	659.8
Over 1 to 2 days . .	8.8	4.9	84.4	13.1	44.0	12.1	48.8	30.6	246.6
Over 2 to 3 days . .	4.0	5.7	263.0	32.4	1.3	0.6	1.5	3.1	311.7
Over 3 to less than 5 days	2.4	5.9	15.7	8.1	4.5	0.5	3.5	9.0	49.6
5 to less than 10 days .	1.5	3.1	18.6	12.0	13.4	0.4	1.2	5.1	55.3
10 to less than 20 days.	10.2	0.7	6.8	14.0	11.5	..	1.0	10.1	54.4
20 to less than 40 days.	3.9	0.2	3.3	0.2	0.8	..	0.1	10.5	18.9
40 days and over. .	..	..	0.2	..	0.6	..	0.1	0.8	1.7
Total. . . .	**49.5**	**33.0**	**553.5**	**190.5**	**158.4**	**46.9**	**125.5**	**240.7**	**1,398.0**
WORKING DAYS LOST ('000)									
Up to 1 day . .	17.3	7.5	84.9	70.1	57.7	22.7	41.0	100.8	401.9
Over 1 to 2 days . .	14.1	7.5	137.6	21.3	65.9	16.5	65.1	54.1	382.0
Over 2 to 3 days . .	9.6	14.9	676.7	87.7	3.4	1.5	3.7	7.9	805.3
Over 3 to less than 5 days	8.8	22.7	61.4	30.8	17.7	2.8	11.1	35.7	191.1
5 to less than 10 days .	8.7	21.3	127.7	79.9	96.3	2.8	7.8	34.4	378.9
10 to less than 20 days.	190.8	11.4	98.6	171.4	199.7	..	12.3	135.7	820.0
20 to less than 40 days.	94.1	4.7	82.1	3.0	23.9	..	3.0	215.7	426.5
40 days and over. .	..	..	10.2	..	32.4	..	2.6	59.2	104.4
Total	**343.3**	**90.0**	**1,279.2**	**464.1**	**497.0**	**46.2**	**146.7**	**643.5**	**3,509.9**
ESTIMATED LOSS IN WAGES ($'000)									
Up to 1 day . .	543.3	224.2	2,203.3	1,817.0	1,720.9	585.1	1,059.6	2,516.7	10,670.3
Over 1 to 2 days . .	461.7	215.1	3,551.9	543.2	1,787.2	437.6	1,510.4	1,155.2	9,662.1
Over 2 to 3 days . .	295.8	479.8	17,509.8	2,111.5	95.8	41.0	96.6	180.9	20,811.0
Over 3 to less than 5 days	314.7	714.7	1,564.9	801.2	522.8	78.6	293.4	884.9	5,175.3
5 to less than 10 days .	260.5	696.8	3,169.2	1,976.7	2,666.6	38.6	244.0	865.5	9,917.7
10 to less than 20 days.	6,370.5	346.9	2,706.3	4,664.6	5,961.9	..	353.1	3,484.3	23,887.6
20 to less than 40 days.	3,210.1	130.1	2,125.2	76.1	820.4	..	89.1	6,168.1	12,619.0
40 days and over . .	..	..	242.5	..	1,285.0	..	90.6	1,399.7	3,017.8
Total	**11,456.5**	**2,807.6**	**33,073.1**	**11,990.2**	**14,860.6**	**1,180.9**	**3,736.8**	**16,655.1**	**95,760.7**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. Industries are classified according to Australian Standard Industrial ClassificationP.—*see* page 301. (*b*) Includes ASIC sub-division5 29, 31, 32, 33.

Causes of disputes

In the following table industrial disputes are classified according to cause, that is, the direct *causes of stoppages of work*. Causes are grouped as follows.

Wages—claims involving general principles relating to wages, including combined claims relating to wages, hours or conditions of work. *Hours of work*—claims involving general principles relating to hours of work. *Leave, pensions, compensation provisions, etc.*—claims involving general principles relating to these provisions. *Managerial policy*—disputes concerning managerial policy of employers including computation of wages, hours, leave, etc. in individual cases; docking pay, etc.; dismissals, etc.; principles of promotion, etc.; employment of particular persons and personal disagreements; production limitations, etc. *Physical working conditions*—disputes concerning physical working conditions including safety issues; protective clothing and equipment, etc.; amenities; shortage of, or condition of, equipment or material; new production methods, etc.; arduous physical tasks, etc. *Trade unionism*—disputes concerning employment of non-unionists; inter-union and intra-union disputes; sympathy stoppages; recognition of union activities, etc. *Other*—disputes concerning protests directed against persons or situations other than those dealing with employer-employee relationship; non-award public holidays; accidents and funerals; no reason given for stoppage; etc.

For details of classifications causes *see* bulletin *Industrial Disputes* (6.6.).

INDUSTRIAL DISPUTES(*a*): CAUSES, AUSTRALIA, 1975

	Mining		*Manufacturing*			*Transport and storage; communication*			
Cause of dispute (*b*)	*Coal*	*Other*	*Metal products, machinery and equipment* (*c*)	*Other*	*Construction*	*Stevedoring services*	*Other*	*Other industries*	*All industries*
			NUMBER OF DISPUTES						
Wages	14	35	257	213	122	20	44	115	820
Hours of work	3	4	7	5	..	2	4	2	27
Leave, pensions, compensation provisions, etc.	..	2	4	4	..	5	8	4	27
Managerial policy	74	76	240	114	110	78	71	73	836
Physical working conditions	34	41	69	25	39	122	27	18	375
Trade unionism	33	26	63	19	31	22	20	11	225
Other	17	4	41	8	7	30	9	6	122
Total	**175**	**188**	**681**	**388**	**309**	**279**	**183**	**229**	**2,432**
			WORKERS INVOLVED (DIRECTLY AND INDIRECTLY) ('000)						
Wages	15.8	8.4	362.8	107.0	72.4	2.7	45.8	110.1	725.1
Hours of work	0.7	0.8	5.0	1.4	..	0.1	2.6	0.1	10.6
Leave, pensions, compensation provisions, etc.	..	0.4	4.6	1.0	..	1.6	0.9	1.3	9.9
Managerial policy	14.9	14.2	54.4	25.5	26.2	10.5	9.6	43.3	198.4
Physical working conditions	7.3	4.5	15.5	3.7	5.4	10.6	5.5	1.3	53.8
Trade unionism	5.3	4.3	14.5	7.2	14.4	3.3	24.9	12.2	86.0
Other	5.6	0.5	96.7	44.6	40.0	18.0	36.3	72.4	314.2
Total	**49.5**	**33.0**	**553.5**	**190.5**	**158.4**	**46.9**	**125.5**	**240.7**	**1,398.0**
			WORKING DAYS LOST ('000)						
Wages	281.3	28.8	1,015.7	318.4	326.0	5.0	68.0	521.7	2,565.0
Hours of work	1.2	8.7	4.0	1.4	..	0.3	3.8	0.8	20.2
Leave, pensions, compensation provisions, etc.	..	0.4	5.4	1.1	..	1.6	0.9	0.7	10.1
Managerial policy	35.1	31.4	119.4	84.4	57.0	9.8	11.8	56.7	405.6
Physical working conditions	9.8	9.4	22.7	13.2	23.4	7.2	8.1	2.0	95.9
Trade unionism	6.6	10.9	52.9	12.9	65.4	4.5	34.4	24.0	211.7
Other	9.2	0.3	59.1	32.7	25.1	17.9	19.5	37.5	201.4
Total	**343.3**	**90.0**	**1,279.2**	**464.1**	**497.0**	**46.2**	**146.7**	**643.5**	**3,509.9**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. Industries are classified according to Australian Standard Industrial Classification—*see* page 301. (*b*) For nature of classification, *see* above. (*c*) Includes ASIC sub-divisions 29, 31, 32, 33.

Methods of settlement of disputes

The following table shows particulars of industrial disputes for 1975, classified according to method of settlement. These statistics relate to the method directly responsible for *ending the stoppage of work*. For more information concerning this classification of methods of settlement *see* the quarterly bulletin, *Industrial Disputes* (6.6).

INDUSTRIAL DISPUTES(*a*): METHODS OF SETTLEMENT, AUSTRALIA, 1975

Method of settlement	*Mining*		*Manufacturing*		*Construction*	*Transport and storage: communication*		*Other industries*	*All industries*
	Coal	*Other*	*Metal products, machinery and equipment(b)*	*Other*		*Stevedoring services*	*Other*		
NUMBER OF DISPUTES									
1. Negotiation	41	72	188	121	78	79	42	51	672
2. Mediation	1	1	2	2	2	1	1	3	13
3. State legislation—									
(a) Under State conciliation, etc. legislation	4	41	19	52	54	1	8	39	218
(b) Intervention, etc. of State government officials	..	..	..	..	..	..	2	2	4
4. Federal and joint Federal-State legislation (*c*)	12	4	62	63	31	6	28	20	226
5. Filling the places of workers on strike or locked out	..	..	..	..	2	..	..	..	2
7. Resumption without negotiation	117	70	409	150	141	192	101	113	1,293
8. Other methods	..	..	1	..	1	..	1	1	4
Total	**175**	**188**	**681**	**388**	**309**	**279**	**183**	**229**	**2,432**
WORKERS INVOLVED (DIRECTLY AND INDIRECTLY) ('000)									
1. Negotiation	6.3	7.8	33.1	20.9	23.6	8.0	9.5	10.1	119.1
2. Mediation	*	*	0.9	0.4	0.2	*	0.1	2.5	4.1
3. State legislation—									
(a) Under State conciliation, etc. legislation	0.2	5.1	4.5	13.6	5.6	0.1	0.7	27.8	57.6
(b) Intervention, etc. of State government officials	..	..	..	..	..	..	0.3	0.4	0.7
4. Federal and joint Federal-State legislation (*c*)	17.6	2.1	321.0	17.3	4.7	0.8	1.9	7.7	373.1
5. Filling the places of workers on strike or locked out	..	..	..	..	*	..	..	..	*
7. Resumption without negotiation	25.4	18.1	192.6	138.4	124.2	37.9	113.1	192.2	842.0
8. Other methods	..	..	1.4	..	0.1	..	*	*	1.5
Total	**49.5**	**33.0**	**553.5**	**190.5**	**158.4**	**46.9**	**125.5**	**240.7**	**1,398.0**
WORKING DAYS LOST ('000)									
1. Negotiation	13.1	22.6	174.8	115.2	210.2	8.3	18.8	44.1	607.1
2. Mediation	*	*	5.3	1.7	3.5	*	2.1	22.5	35.1
3. State legislation—									
(a) Under State conciliation, etc. legislation	0.3	25.9	23.9	74.2	41.8	0.1	3.5	309.5	479.3
(b) Intervention, etc. of State government officials	..	..	..	..	..	..	1.4	0.3	1.7
4. Federal and joint Federal-State legislation (*c*)	285.4	11.9	859.1	91.9	65.9	2.3	16.8	106.8	1,440.1
5. Filling the places of workers on strike or locked out	..	..	..	..	0.3	..	..	..	0.3
7. Resumption without negotiation	44.5	29.6	206.8	181.0	175.1	35.5	104.1	160.2	936.8
8. Other methods	..	..	9.4	..	0.2	..	*	*	9.6
Total	**343.3**	**90.0**	**1,279.2**	**464.1**	**497.0**	**46.2**	**146.7**	**643.5**	**3,509.9**

(*a*) Refers only to disputes involving a stoppage of work of ten man-days or more. Industries are classified according to Australian Standard Industrial Classification—*see* page 301. (*b*) Includes ASIC sub-divisions 29, 31, 32, 33. (*c*) Includes Industrial Tribunals under (i) Conciliation and Arbitration Act (ii) Coal Industry Acts (iii) Stevedoring Industry Act (iv) Other Acts. * Less than 50.

WORKERS' COMPENSATION LEGISLATION

A conspectus of the principal provisions of Workers' Compensation Acts and Ordinances in force in Australia at 31 December 1973 is included in *Labour Report* No. 58, 1973, pages 235–47.

LABOUR ORGANISATIONS

Labour organisations in Australia

The figures shown in this section are prepared from a special collection of membership of labour organisations at 31 December each year. The affairs of single unions are not disclosed in the published results and this has assisted in securing complete information. The Bureau is indebted to the secretaries of trade unions for their co-operation in supplying information. More detailed statistics appear in the annual *Labour Report*. Current figures are published in an annual bulletin, *Trade Union Statistics: Australia* (6.24).

Trade unions

For the purpose of these statistics a trade union is defined as an organisation consisting predominantly of employees and whose principal activities include the negotiation of rates of pay and conditions of employment for its members.

The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organisation, which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organisations: (a) the local independent, (b) the State, (c) the interstate, and (d) the Australasian or international; but a number of variations occur from each of these classes. The schemes of organisation of interstate or federated unions vary greatly in character. In some unions the State organisations are bound together under a system of unification with centralised control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes. Statistics relating to interstate or federated trade unions are shown in a table on page 310.

Returns showing membership by States and Territories at 31 December each year are obtained for all trade unions and employee organisations. The following table shows the position at the end of each of the years 1973 to 1975.

TRADE UNIONS: NUMBER AND MEMBERSHIP, STATES AND TERRITORIES
DECEMBER 1973 TO 1975

	Number of separate unions			*Number of members ('000)*			*Percentage increase in membership(a)*		
State or Territory	*1973*	*1974*	*1975*	*1973*	*1974*	*1975*	*1973*	*1974*	*1975*
New South Wales	192	190	187	1,032.0	1,047.9	1,075.0	4.4	1.5	2.6
Victoria	159	158	159	681.6	711.6	722.3	4.5	4.4	1.5
Queensland	140	137	134	362.1	375.1	373.1	5.4	3.6	4.8
South Australia	135	135	135	241.8	252.8	255.6	8.1	4.5	1.1
Western Australia	154	151	147	197.4	216.4	214.3	6.8	9.6	−1.0
Tasmania	118	121	117	84.1	89.1	87.4	4.5	5.9	−1.9
Northern Territory(*b*)	58	65	62	13.5	16.4	15.2	(*b*)	(*b*)	(*b*)
Australian Capital Territory(*b*)	87	88	87	47.5	52.5	50.9	(*b*)	(*b*)	(*b*)
Australia	**(*c*)294**	**(*c*)285**	**(*c*)280**	**2,659.9**	**2,761.7**	**2,813.8**	**5.4**	**3.8**	**1.9**

(*a*) On preceding year. (*b*) Some unions in the Territories are affiliated with State organisations and their membership is reported under the heading of that State. More accurate reporting of membership by location by trade unions over the years is reflected in the annual figures for the Territories and this affects their comparability over time. (*c*) Without interstate duplication—*see* below.

In the preceding table, under the heading 'Number of separate unions', a union reporting members in a State or Territory is counted as one union within that State or Territory. The figures do not add to the Australian total (shown in the last line) because a union represented in more than one State or Territory is included in the figure for each State or Territory in which it is represented, but is counted only once in the Australian total.

A table showing the number and membership of trade unions in Australia for each year since 1912 is included in the Appendix to *Labour Report* No. 58, 1973.

Number of trade union members and proportion of wage and salary earners. The following table shows the approximate percentages of wage and salary earners in employment who were members of trade unions. The estimates of total wage and salary earners have been derived by adding figures for employees in agriculture and in private households employing staff to the estimates of employees in all other industries as at the end of each year. The percentages shown should be regarded as giving only a broad indication of the extent of union membership among wage and salary earners because they are based on estimates of *employed* wage and salary earners that are subject to revision. The degree of unemployment of reported union members would affect the percentages for a particular year and comparisons over time. The employment estimates have recently been revised to incorporate new benchmarks derived from the 1971 population census and other sources and are now classified according to the Australian Standard Industrial Classification. The percentages shown in this table for 1971 and later years have been revised. The percentages have been revised back to 1968. For details *see Trade Union Statistics: Australia*, December 1975 (6.24).

TRADE UNIONS: NUMBER OF MEMBERS AND PROPORTION OF TOTAL WAGE AND SALARY EARNERS, AUSTRALIA(*a*)

End of December—	*Number of members* ('000)			*Proportion of total wage and salary earners(a)* (*Per cent*)		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
1971	1,818.2	618.3	2,436.6	60	40	53
1972	1,827.4	696.2	2,523.7	59	43	54
1973	1,904.9	755.0	2,659.9	61	44	55
1974	1,964.4	797.3	2,761.7	62	46	56
1975	1,966.0	847.9	2,813.8	63	48	58

(*a*) *See* text above.

Interstate or federated trade unions. The following table gives particulars of the number and membership of interstate or federated trade unions in 1975.

INTERSTATE OR FEDERATED TRADE UNIONS(*a*): AUSTRALIA, DECEMBER 1975

	Unions operating in—							
	1 *State*	2 *States*	3 *States*	4 *States*	5 *States*	6 *States*	2 to 6 *States*(*b*)	*Total all unions*
Number of unions . . .	139	8	7	14	25	87	141	280
Number of members ('000) .	168.5	18.0	57.3	147.6	202.1	2,220.3	2,645.3	2,813.8

(*a*) Certain unions in this group have, in addition to branches in the States, branches in the Northern Territory or the Australian Capital Territory or both. (*b*) Total of previous five columns. Figures refer to interstate or federated unions.

Employer and employee organisations registered under Industrial Arbitration Acts, etc.

The Federal *Conciliation and Arbitration Act* 1904–1975 and a number of State industrial arbitration acts provide for the registration of employer and employee organisations as outlined below. For further details *see* the annual *Labour Report*. In general, registration is necessary before an organisation may appear before the relevant industrial arbitration tribunal.

In Victoria and Tasmania where wages and conditions of work in the State sphere are determined by Wages Boards there is no provision in industrial arbitration legislation for registration of trade unions or employer organisations.

Federal. At the end of 1975 the number of employers' organisations registered under the provisions of the *Conciliation and Arbitration Act* 1904–1974 was 78. The number of unions registered at the end of 1975 was 147, with membership of 2,482,200, representing 88 per cent of the total membership of all trade unions in Australia. Lists of organisations of employees and employers registered under this Act are contained in the *Industrial Information Bulletin*, Vol. 30 No. 1, January 1975 published by the Department of Labor and Immigration.

New South Wales. At 30 June 1975 there were 119 employee unions and 287 employer unions registered under provisions of the Industrial Arbitration Act, 1940–1975, and 136 employee unions, 11 employer unions, and 2 other unions registered under the Trade Union Act, 1881–1972. Lists of unions registered under these Acts are included in the *New South Wales Industrial Gazette* (*see* Vol. 198 Part 1 for details at 30 June 1975).

Queensland. At 31 December 1975 there were 73 employee unions registered under the *Industrial Conciliation and Arbitration Act* 1961–1974 with a reported membership of 340,943. At the same date 43 employer unions with a reported membership of 39,613 employers were registered. Lists of registered employee and employer unions are published in the annual report of the President of the Industrial Court.

South Australia. At the end of December 1975 there were 6 employer associations and 71 employee associations registered under the provisions of the *Industrial Conciliation and Arbitration Act* 1972–1975. Membership of these employee associations totalled approximately 198,000.

Western Australia. At 30 June 1975 there were 85 unions of workers, with an aggregate membership of 178,171, registered under the provisions of the *Industrial Arbitration Act*, 1912–1975. At the same date there were 14 registered unions of employers with a reported aggregate membership of 2,181 employers. Lists of registered unions of workers and of employers together with membership figures are published in the *Western Australian Industrial Gazette* (*see* Vol. 54, Appendix XIII).

Central labour organisations

Trades and Labour Councils. Delegate organisations, usually known as Trades Hall Councils or Labour Councils and consisting of representatives of a number of trade unions, have been established in the capital cities and in a number of other centres in each State. In the centres where these councils exist most unions or local branches operating in the district are affiliated. The district councils obtain their finance by means of a *per capita* tax on members of affiliated unions.

At 31 December 1974 there were 48 trades and labour councils in Australia, including councils that were affiliated with, or were branches of, a large State or district council. In New South Wales there were 10 trades and labour councils, 8 in Victoria, 13 in Queensland, 7 in South Australia, 3 in Western Australia, 6 in Tasmania, and 1 in the Australian Capital Territory.

As well as trades and labour councils there are councils organised on trade lines and composed of delegates from separate unions whose members' interests are closely connected by reason of their occupations. Delegate councils of unions connected directly or indirectly with the metal trades, or with the building trades, are examples of such organisations.

Australian Council of Trade Unions. A central labour organisation, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May 1927. The A.C.T.U. consists of affiliated unions and approved State Trades and Labour Councils and Provincial Councils. The State Trades and Labour Council in each State is the State Branch of the A.C.T.U. and it has the right to appoint one representative to act on the executive of the Council. In addition to the four A.C.T.U. officers and representatives of the State Branches of the A.C.T.U., seven delegates are elected by and from Congress, one from each of the following industry groups: Building, Food and distributing services, Manufacturing, Metal Services, Transport, and the A.W.U. group. The President and Secretary are full-time officials and, with the two Vice-Presidents, are elected by and from the Australian Congress of Trade Unions. The ordinary meetings of Congress are held in alternate years. The 1973 Biennial Congress was held in August-September. Special meetings of Congress are held whenever deemed advisable by decision of the executive, as approved by the majority of its branches, or by resolution supported by unions representing one-third of the total membership of the A.C.T.U.

For further particulars *see* the annual *Labour Report*.

Other. In addition to the A.C.T.U., other central labour organisations exist. These include the *Australian Council of Salaried and Professional Associations*, the *Council of Australian Government Employee Organisations* (formerly the *Council of Commonwealth Public Service Organisations*) and the *Council of Professional Associations*. Details of these councils will be found in *Labour Report* No. 58, 1973, pages 254–55.

International Labour Organisation

The International Labour Organisation (I.L.O.) was established on 11 April 1919, as an autonomous institution associated with the League of Nations. Its original constitution was adopted as Part XIII of the Treaty of Versailles. With certain amendments this constitution remains the charter of I.L.O. to this day, bringing governments, employers and trade unions together to discuss international labour and social problems. A new definition of the aims and purposes of the I.L.O., known as the Declaration of Philadelphia, was added to the constitution at the 1944 Session of the International Labour Conference and this asserted the responsibility of I.L.O. in combating poverty and insecurity. In 1946 the Organisation became the first of the specialised agencies of the United Nations. Under the terms of agreement, the United Nations recognises the I.L.O. as a specialised agency having responsibility in the field defined by its constitution, which embraces labour conditions, industrial relations, employment organisation, social security and other aspects of social policy.

The Organisation has three basic parts. These are the International Labour Conference, its highest authority, which usually meets annually; the Governing Body, its executive council, which usually meets three times each year; and the International Labour Office, which provides the

Secretariat of the Organisation. The Conference is composed of delegations from the member States of the Organisation. At the end of 1974 there were 125 member States, each of which is entitled to be represented by four delegates—two representing the government, one representing employers and one representing workers, together with their advisers. Each delegate speaks and votes independently, so that all points of view in each country are fully expressed. The Governing Body consists of the representatives of twenty-eight governments, and fourteen employers' and fourteen workers' representatives. Particulars of the proceedings of International Labour Conferences up to the 58th Session and details of I.L.O. conventions ratified by Australia are given in *Labour Report* No. 58, 1973, pages 255–59.

PRICES JUSTIFICATION TRIBUNAL

General

The Prices Justification Tribunal was established in August 1973 under the provisions of the *Prices Justification Act* 1973. The Tribunal is a fully discretionary body appointed under the Act to consider the justification for proposed price increases put to it by companies subject to the Act. It is not a price regulating authority.

Organisation

The Tribunal consists of a Chairman and such number of other members as are from time to time appointed in accordance with the Act. The *Office of the Prices Justification Tribunal* comprises the staff required to assist the Tribunal in the performance of its functions, and consists of persons appointed or employed under the *Public Service Act* 1922.

Further information on the Prices Justification Tribunal is contained in its Annual Reports to Parliament.

Activities in 1974–75

The Tribunal processed 7,502 notifications of higher prices during the year 1974–75. 632 exemption orders were authorised, and the Tribunal held 33 public inquires during the course of the year. In addition 42 investigations were undertaken pursuant to the Tribunal's powers under Section 16 of the Act, and 659 inquires were dealt with. Of the 7,502 notifications, proposed prices were approved on the basis of the original notice, without public inquiry, in 6,271 cases, 863 notices were approved on the basis of substitute notices for lower price increases, and 178 notices were withdrawn by companies. The remainder of cases either proceeded to public inquiry, or were withdrawn or amended after a Public Inquiry notice was issued. Comparable figures for the 11 months ended 30 June 1974 were: 3,859 notifications; 3,356 approved without amendment; 421 amended; 36 withdrawn; 15 public inquires; 1,495 exemption orders.

Legislative provisions

Section 16 of the *Prices Justification Act* 1973 provides that:

> 'The functions of the Tribunal are to inquire and report to the Minister, in any case where the Tribunal is required to do so by the Minister or the Tribunal considers that it is desirable to do so, whether the price or prices at which a company or companies (whether a prescribed company or prescribed companies or not) supplies or supply, or proposes or propose to supply, goods or services of a particular description is or are justified and, if the Tribunal is of the opinion that the price or any of the prices is not justified, what lower price for the supply by the company or companies concerned of goods or services of that description would be justified.'

Three important features of the legislation are:

(*a*) A Tribunal inquiry may be initiated by the Minister.
(*b*) The Tribunal may initiate inquiries in its own right.
(*c*) Following an inquiry, the Tribunal is required to report whether it is of the opinion that the price at which the company supplies or proposes to supply the goods in question is justified and if not what lower price would be justified.

Other important features of the legislation include the following:

(*a*) The legislation applies to prescribed companies which are companies or groups of related companies with an annual turnover in excess of $20 million. Such companies are required to notify the Tribunal in writing of any proposal to increase the prices of goods or services supplied by that company.
(*b*) Companies whose annual turnover does not exceed $20 million are not required to notify the Tribunal of proposed price increases but the Tribunal may investigate the prices charged by such companies on its own initiative.

(*c*) The Tribunal must notify a company within 21 days of the receipt of a notice of proposed prices if it intends to proceed to a public inquiry. If the period of 21 days has elapsed or the Tribunal has notified the company that it does not intend to hold an inquiry, the company may put the proposed prices into operation.

(*d*) In the event of a public inquiry the prices of a company's goods and services referred to in its notice must not be raised until the Tribunal has completed the inquiry and its report has been made public by the Minister.

Guidelines and criteria

The legislation does not provide guidelines or criteria for the Tribunal to observe in its consideration of price proposals. The development of such guidelines and criteria has rested with the Tribunal. In considering notices of proposed price increases the Tribunal has regard for all relevant aspects and particularly the following:

(*a*) Costs which have actually been incurred.

(*b*) The distinction between 'avoidable' and 'unavoidable' cost increases.

(*c*) Wage increases which are over-award wage agreements, consent agreements or other arrangements. In this regard the Tribunal places responsibility on companies to justify recoupment in prices of additional costs resulting from such agreements or arrangements on wage rates.

(*d*) Prices should reflect a reasonable allowance for productivity achievements to offset increases in costs.

(*e*) Regard is taken of the level of profitability of the company and its capacity to maintain a reasonable level of investment and growth.

Notices of proposed prices

Section 18 of the Prices Justification Act requires companies to submit a notice in writing to the Tribunal giving details of proposed increases in prices to apply to goods or services supplied by the company. There are four broad categories of treatment of a company's notification of price increases.

(*a*) Where notified price increases are accepted by the Tribunal the company is forwarded a *Notice of No Inquiry* and may proceed with the proposed price increases.

(*b*) If the Tribunal considers that a lower price than that proposed by a company is just, it may invite the company to discuss the matter in private session. If agreement is reached on a level of price increase then a *Substituted Price Notice* is issued and the company may proceed with the agreed price increase.

(*c*) If a company chooses to pursue a price proposal discussed in private session but for which agreement was not forthcoming, the Tribunal may decide to consider the matter in a *Public Inquiry*.

(*d*) The Prices Justification Act, Section 18 (8), provides for the Tribunal to give an exemption to a company in respect of its obligation to notify the Tribunal of proposed increases in prices of goods or services supplied. Such exemptions are given as a device to enable companies to proceed with price increases in cases where the Tribunal is satisfied the conditions governing the exemption and the competitive forces in the market place are sufficient to ensure that prices charged will be justified.

CHAPTER 11

OVERSEAS TRANSACTIONS

This chapter includes statistics of overseas trade, balance of payments, and overseas investment by private investors, but because of limitations of space the statistics are, in the main, restricted to summarised form. For detailed information *see* the *Annual Bulletin of Overseas Investment, Australia* (5.20) and the associated bulletin *Overseas Borrowings by Companies in Australia* (5.39) (latest issue 1974–75; and the other annual bulletins *Overseas Trade* (preliminary) (8.15) (8.16) and final (issued in two parts) (8.11)), *Australian Exports, Country by Commodity* (8.4), *Australian Imports, Country by Commodity* (8.19), *Imports Cleared for Home Consumption* (issued in two parts) (8.7) and the annual bulletin *Balance of Payments* (8.1). Preliminary information is available in summary form in the statements *Balance of Payments—Quarterly Summary* (8.2), *Overseas Investment—Preliminary Bulletin* (annual) (5.21), *Overseas Borrowings by Companies in Australia* (preliminary) (5.41), *Australian Overseas Trade—Exports and Imports* (8.12) (monthly), *Overseas Trade—Exports by Commodity Divisions* (monthly) (8.18), and *Overseas Trade—Imports by Commodity Divisions* (monthly) (8.13). Current information is included in the *Monthly Review of Business Statistics* (1.4), the *Digest of Current Economic Statistics* (1.5), and in more detail in the *Monthly Bulletins of Overseas Trade Statistics* (8.9) (8.10). There are also the following additional mimeographed statements: *Exports of Major Commodities by Country* (monthly) (8.5), *Imports of Assembled New Passenger Motor Cars* (monthly) (8.8) and *Exports by Mode of Transport* (quarterly) (8.25). Additional unpublished details of exports and imports can be supplied on request.

A subscription service is available from this Bureau to provide for the detailed requirements of individual users of overseas trade statistics. These special periodical statements are obtainable monthly or quarterly and show trade according to items of the Australian Export and Import Commodity Classifications or statistical key code dissections of Australian Customs Tariff items. A nominal charge is made which varies depending on the amount of detail required.

OVERSEAS TRADE

Constitutional provisions and legislation

Constitutional provisions

By the Commonwealth of Australia Constitution Act, Section 51 (1), the power to make laws with respect to trade and commerce with other countries was conferred on the Australian Parliament. Under Section 86 of the Constitution, the collection and control of duties of customs and excise passed to the Executive Government of the Commonwealth on 1 January 1901. Other references to trade and commerce are contained in Sections 87 to 95 of the Constitution (*see* pages 17–18).

Commonwealth Government legislation

Commonwealth Government legislation affecting overseas trade includes: the Customs Act, the Customs Tariff and the *Customs Tariff (Anti-Dumping) Act* 1975. The Customs Tariff provides the statutory authority for imposing the actual rates of duty operative from time to time, while the Customs Tariff (Anti-Dumping) Act provides protection for Australian industry against various forms of unfair trading.

The Customs Tariff

The first Australian Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to certain imports from countries of the Commonwealth and certain developing countries. Duties are imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are a major source of revenue but in its protective character the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the 'Brussels Nomenclature' which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a 'Brussels-type' tariff since 1 July 1965.

Preferential rates. Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, and Papua New Guinea, and certain goods the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference. With the termination on 1 February 1973 of the United Kingdom-Australia Trade Agreement existing preferential rates applicable to United Kingdom goods are under review.

The following are the rules of origin for preference purposes as defined in the Customs Act.

151.—(1.) For the purposes of this Act and the *Customs Tariff* 1966 (other than section 20 of the last-mentioned Act), goods shall be treated as the produce of a country if they are unmanufactured raw products of the country.

(2.) For the purposes of this Act and the *Customs Tariff* 1966 (other than section 16A or 20 of, or Part IX of Schedule 5 to, the last-mentioned Act), goods shall be treated as the manufacture of a country—

(*a*) if the goods were wholly manufactured in the country from materials of one or more of the following classes:—
  (i) unmanufactured raw products;
  (ii) materials wholly manufactured in the country or in Australia, or in the country and in Australia; and
  (iii) imported materials that the Minister has, in relation to the country, determined, by notice published in the *Gazette*, to be manufactured raw materials; or

(*b*) if the goods were partly manufactured in the country, the process last performed in the manufacture of the goods was performed in the country and—
  (i) not less than three-quarters or, in the case of goods that are of a class or kind not commercially manufactured in Australia, one-quarter of the factory or works cost of the goods is represented by the value of labour or materials, or, of labour and materials, of the country or of the country and Australia; or
  (ii) in the case where the country is New Zealand—not less than one-half, or, in the case of goods, included in a class of goods in respect of which the Minister has determined, by notice published in the *Gazette*, that another portion is appropriate, that portion, of the factory or works cost of the goods is represented by the value of labour, or materials, or of labour and materials, of New Zealand or of New Zealand and Australia.

(3.) For the purposes of section 16A of, or Part IX of Schedule 5 to, the *Customs Tariff* 1966 goods shall be treated as the manufacture of a country if—

(*a*) the process last performed in the manufacture of the goods was performed in the country; and

(*b*) not less than one-half of the factory or works cost of the goods is represented by the value of labour or materials, or of labour and materials, of the country or of the country and one or more of the following countries, that is to say, Australia and countries that, at the time the goods are entered for home consumption, are developing countries, other than a country that, by virtue of a direction under sub-section (2.) of section 11 of the *Customs Tariff* 1966 is not to be treated as a developing country in relation to the class of goods in which the goods are included.

(4.) For the purposes of the last two preceding sub-sections, the Minister may, by notice published in the *Gazette*—

(*a*) specify the manner in which the factory or works cost of goods is to be determined; and

(*b*) specify the manner in which the value of labour, the value of materials or the value of labour and materials is to be determined.

(5.) For the purposes of sub-paragraph (1) of paragraph (b) of sub-section (2.) the Minister may, by notice published in the *Gazette*, determine that goods specified in the notice, or goods included in a class of goods so specified, shall be deemed to be goods of a class or kind not commercially manufactured in Australia.

(6.) The Minister may, by notice published in the *Gazette*, determine that the reference in sub-paragraph (1) of paragraph (b) of sub-section (2.) to one-quarter shall, in relation to goods specified in the notice, or goods included in a class of goods so specified, be read as a reference to one-half.

(8.) Notwithstanding anything contained in this section—

(*a*) the Minister may, subject to the next succeeding paragraph, direct that, for the purposes of this Act and the *Customs Tariff* 1966 (other than section 16A or 20 of, or Part IX of Schedule 5 to, the last-mentioned Act), a cinematograph film that is, under the laws of the United Kingdom relating to the registration of cinematograph films, certified by the Board of Trade of the United Kingdom to be registered as a British film shall be treated as the manufacture of the United Kingdom; and

(*b*) a cinematograph film printed in the United Kingdom shall not, for the purposes of this Act or the *Customs Tariff* 1966 (other than section 16A or 20 of, or Part IX of Schedule 5 to, the last-mentioned Act), be treated as the manufacture of the United Kingdom unless it was printed from a negative the manufacture of the United Kingdom.

(9.) This section does not apply for the purposes of determining whether goods are the produce, or the manufacture, of Australia.

(10.) In this section, "unmanufactured raw products" means natural or primary products that have not been subjected to an industrial process, other than an ordinary process of primary production, and includes, without limiting the generality of the foregoing—

(*a*) animals, and parts of animals obtained by killing, including bones, hides and skins (raw or sun-dried);

(*b*) greasy wool;

(*c*) plants, and parts of plants, including raw cotton, bark, fruit, nuts, grain, seeds (in their natural state) and unwrought logs;

(*d*) minerals in their natural state and ores; and

(*e*) crude petroleum.

151A—(1.) For the purposes of this Act and the *Customs Tariff* 1966 (other than section 16A or 20 of, or Part IX of Schedule 5 to, the last-mentioned Act), goods shall not be treated as the produce or manufacture of the United Kingdom, Canada, New Zealand, Ireland, Malawi, Southern Rhodesia*, Zambia, the Territory of Papua or the Territory of New Guinea unless they have been shipped from that country to Australia and, except where the Collector is satisfied that the intended destination of the goods when originally shipped from that country was Australia, have not been transhipped.

The last preceding sub-section does not apply—

(*a*) to goods the produce or manufacture of a country other than New Zealand that are imported into Australia from New Zealand; or

(*b*) to goods the produce or manufacture of a country other than the Territory of Papua or the Territory of New Guinea that are imported into Australia from the Territory of Papua or the Territory of New Guinea.

For the purposes of this section—

(*a*) goods may be treated as having been shipped from the Territory of Papua or the Territory of New Guinea if they have been shipped from either of those territories; and

(*b*) goods may be treated as having been shipped from Malawi, Southern Rhodesia or Zambia if they have been shipped from any of those countries or from Lourenco Marques or Beira in Mozambique.

Declared preference countries, *Customs Tariff*. 10.—(1.) The Minister may, by order published in the *Gazette*, declare that a country specified in the order is a declared preference country for the purposes of this Act.

(2.) An order under the last preceding sub-section has effect, or shall be deemed to have had effect, from and including such date (which may be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(3.) The Minister may, by order, published in the *Gazette*, revoke an order under sub-section (1.) of this section.

(4.) An order under the last preceding sub-section has effect from and including such date (which shall not be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(5.) Goods shall not be treated as the produce or manufacture of a declared preference country for the purposes of this Act unless, at the time the goods are entered for home consumption, the order under sub-section (1.) of this section in which the declared preference country is specified has effect or is deemed to have had effect.

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* Under the United Nations Security Council's resolutions on Southern Rhodesia trade with that country is prohibited.

Declared preference countries comprise:

Bahamas
Barbados
Bermuda
British Indian Ocean Territory
British Virgin Islands
Brunei
Cyprus
Falkland Islands and Dependencies
Fiji
Gambia, The
Ghana
Gibraltar
Gilbert and Ellice Islands Colony
Grenada
Guyana
Honduras, Republic of
Hong Kong, Colony of
Jamaica
Kenya
Leeward Islands
Malaysia
Maldives, Republic of the
Malta
Mauritius
Nigeria
St Helena
Seychelles
Sierra Leone
Singapore, Republic of
Solomon Islands
Sri Lanka
Tanzania
Tonga
Trinidad and Tobago
Uganda
Windward Islands

Developing countries, Customs Tariff

11.—(1.) The Minister may, by order published in the *Gazette*—

(*a*) declare that a country specified in the order is a developing country for the purposes of this Act; or

(*b*) declare that a place specified in the order is to be treated as a developing country for the purposes of this Act.

(2.) The Minister may, in an order under sub-section (1.), direct that a country or place that is specified in the order shall not be treated as a developing country in relation to a class of goods specified in the direction.

(3.) An order under sub-section (1.) has effect, or shall be deemed to have had effect, from and including such date (which may be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

(4.) The Minister may, by order published in the *Gazette*, revoke an order under sub-section (1.).

(5.) An order under sub-section (4.) has effect from and including such date (which shall not be a date earlier than the date of publication of the order in the *Gazette*) as is specified in the order.

Developing countries comprise:

Afghanistan
Albania
Algeria
American Samoa
Angola
Arab Republic of Egypt
Argentina
Bahamas
Bahrain
Bangladesh
Barbados
Belize
Benin, People's Republic of
Bermuda
Bhutan
Bolivia
Botswana
Brazil‡
British Indian Ocean Territory
British Virgin Islands
Brunei
Bulgaria
Burma, Socialist Republic of the Union of
Cameroon
Cape Verde Islands
Cayman Islands
Central African Republic
Chad
Chile
Colombia
Comoro Islands
Congo, People's Republic of the
Cook Islands
Costa Rica
Cuba
Cyprus
Democratic People's Republic of Korea
Democratic Republic of Sao Tome and Principe
Democratic Republic of Viet Nam
Dominican Republic
Ecuador
El Salvador
Ethiopia
Falkland Islands and Dependencies
Fiji
French Polynesia
Gabon
Gambia, The
Ghana
Gibraltar
Gilbert and Ellice Islands Colony
Greece
Grenada
Guam
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras, Republic of
Hong Kong, Colony of*
India
Indonesia
Iran
Iraq
Israel*
Ivory Coast
Jamaica
Johnston and Sand Islands
Jordan
Kenya
Khmer Republic, The
Kuwait
Laos
Lebanon

DEVELOPING COUNTRIES—*continued*

Leeward Islands
Lesotho
Liberia
Libyan Arab Republic
Macao
Malagasy Republic
Malawi
Malaysia
Maldives, Republic of The
Mali
Malta
Mauritania
Mauritius
Mexico
Midway Island
Mongolia
Morocco
Mozambique
Nepal
Netherlands Antilles
New Caledonia
New Hebrides Condominium
Nicaragua
Niger
Nigeria
Niue Island
Oman
Pakistan
Panama
Papua New Guinea
Paraguay
People's Democratic Republic of Yemen
Peru
Philippines
Pitcairn Islands
Portugal
Qatar
Republic of Equatorial Guinea
Republic of Korea[||]
Republic of Nauru
Republic of Viet Nam
Romania
Rwanda
St Helena
St Pierre and Miquelon
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore, Republic of
Solomon Islands
Somali Democratic Republic
Spanish Sahara
Sri Lanka
Sudan
Surinam
Swaziland
Syrian Arab Republic
Taiwan Province[§]
Tanzania
Territory of the Afars and Issar
Thailand
Timor
Togo
Tokelau Islands
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turks and Caicos Islands
Uganda
Union of Arab Emirates (Ras Al Khaimah, Abu Dhabi, Dubai, Sharjah Ajman, Umm Al Qaiwain, Fujairah)
United States Trust Territory of the Pacific Islands
Upper Volta
Uruguay
Venezuela
Virgin Islands of the United States
Wake Island
Wallis and Futuna Islands
Western Samoa
Windward Islands
Yemen Arab Republic
Yugoslavia
Zaire, Republic of
Zambia

General rates: General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

By-law provisions. Customs By-laws and Ministerial Determinations are legal instruments, made in accordance with the provisions of Sections 271 to 273D of the Customs Act, to authorise admission of imported goods either free of duty or at rates of duty lower than those normally applicable. The rates of duty that apply where concessional entry has been granted are contained in the Customs Tariff and are identified by the words 'as prescribed by by-law'. The most frequently used by-law

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[*] Except in respect of goods to which item 36 of Schedule 2 applies, Hong Kong has been declared not to be a developing country in relation to:
- (*a*) gloves, mittens or mitts of the work type falling within 42.03.1, not being goods that—
  - (i) were in transit to Australia or in bond in Australia on 24 October 1975; and
  - (ii) are entered for home consumption on or before 24 January 1976; or
- (*b*) goods to which a tariff classification specified hereunder applies:

34.06
42.03.9
61.05
67.04.1
67.04.2
67.04.3
67.04.9
70.12
85.09.3
85.09.4
94.01.2
94.01.4
94.01.9
94.03.2
94.03.9
97.02
97.03.9
98.15

[†] Except in respect of goods to which item 36 of Schedule 2 applies, Israel has been declared not to be a developing country in relation to goods to which 40.11.2 or 40.11.9 applies.

[‡] Except in respect of goods to which item 36 of Schedule 2 applies, Brazil has been declared not to be a developing country in relation to goods to which 41.02.9 or 41.08 applies.

[§] Except in respect of goods to which item 36 of Schedule 2 applies, Taiwan has been declared not to be a developing country in relation to:
- (*a*) goods falling within 40.11.2 or 40.11.9;
- (*b*) gloves, mittens or mitts of the work type falling within 42.03.1, not being goods that—
  - (i) were in transit to Australia or in bond in Australia on 24 October 1975; and
  - (ii) are entered for home consumption on or before 24 January 1976;
- (*c*) drilling machines of the bench or pedestal type falling within 84.45.3, not being goods that—
  - (i) were in transit to Australia or in bond in Australia on 11 November 1975; and
  - (ii) are entered for home consumption on or before 10 February 1976;
- (*d*) launches and sailing yachts having an overall length not less than 7.5 metres and not more than 13.5 metres falling within 89.01.9;
- (*e*) goods falling within 94.01.1, 94.01.3, 94.01.9 or 94.03.9; and
- (*f*) fishing rods falling within 97.07.9.

[||] Except in respect of goods to which item 36 of Schedule 2 applies, the Republic of Korea has been declared not to be a developing country in relation to fishing rods falling within 97.07.9.

provision is Item 19 in Schedule 2 to the Customs Tariff which allows duty free admission of goods, 'being goods a suitable equivalent of which that is the produce or manufacture of Australia is not reasonably available'. Normally by-laws identify goods by general description, have neither quantity nor time limitations and may be used by any importer. Ministerial Determinations may be either in that form or if it is necessary to limit the availability of concessions to ensure that the tariff protection accorded to local industry is maintained, be restricted in some way, e.g. quantity or time limitations. By-laws and notices of the making of Ministerial Determinations are published in the Commonwealth of Australia Gazette.

Primage duties. In addition to the ordinary duties of customs imposed by the Customs Tariff, *ad valorem* primage duties at rates of three per cent, seven and a half per cent and 10 per cent are charged on some goods according to the types of goods and origin thereof. Other goods are exempt from primage duty. Goods the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island and Papua New Guinea are exempt from primage duty.

Anti-dumping duties. The *Customs Tariff* (*Anti-dumping*) *Act* 1975 provides protection for Australian industry against various forms of unfair trading. Under this Act dumping duty may be imposed on goods that are sold to Australian importers at a price which is less than the normal value of the goods, where this causes or threatens material injury to an Australian industry. 'Normal value' under the Act means:

(*a*) the price paid for like goods sold for use in the country of export;
(*b*) the cost of production, plus f.o.b. charges, selling costs and profit;
(*c*) the highest price paid for like goods sold to a third country;
(*d*) the price of like goods from a country with similar costs of production to the exporting country; or
(*e*) where insufficient information is available, a price determined by the Minister.

The amount of dumping duty is the difference between the normal value and f.o.b. export price.

Countervailing duty may be levied on goods in respect of which any subsidy, bounty, reduction or remission of freight, or other financial assistance has been, or is being, paid or granted directly or indirectly upon the production, manufacture, carriage or export of those goods. The amount of the countervailing duty in respect of any goods is a sum equal to the amount of the subsidy, bounty, reduction or remission of freight or other financial assistance.

Import controls

Customs (*Import Licensing*) *Regulations.* A comprehensive system of import licensing was introduced in Australia at the beginning of the Second World War under the authority of the Customs (Import Licensing) Regulations. Following the gradual relaxation of the restrictions from the end of the war, import licensing was re-imposed on 8 March 1952 and continued in force until 18 October 1962. From that date restrictions were removed from all commodities with the exception of some goods retained under control for reasons associated with the protection of Australian industry. From 1974, some additional commodities were brought under short term licensing control for industry protection of emergency nature. The goods subject to import licensing control as at 1 April 1976 are broadly described as used, secondhand or disposal earthmoving and construction equipment, used or secondhand four-wheel-drive vehicles, completely built up motor vehicles, certain footwear and certain apparel from China (excluding Taiwan Province) or Taiwan Province.

Tariff quotas. Ministerial Determinations under the By-law provisions (*see* above) are also utilised to give effect to Government decisions to restrain the quantity of particular goods to be imported over a given period. In these cases import quotas are issued to established importers restricting the quantity which may be entered at the normal duty rate. Goods imported in excess of quotas issued attract a substantial additional duty.

Export controls and incentives

Export restrictions. Section 112 of the Customs Act provides that the Governor-General may, by regulation, prohibit the exportation of goods from Australia and that this power may be exercised by: (*a*) prohibiting the exportation of goods absolutely; (*b*) prohibiting the exportation of goods to a specified place; and (*c*) prohibiting the exportation of goods unless prescribed conditions or restrictions are complied with. Goods subject to this export control are listed in the Customs (Prohibited Exports) Regulations.

Exchange control—Banking Act 1959. As an integral part of the framework of exchange control, a control over goods exported from Australia is maintained under the provisions of Part III of the Banking (Foreign Exchange) Regulations, to ensure that the full proceeds of such goods are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Reserve Bank of Australia. This action is complementary to that taken under other parts of the Banking (Foreign Exchange) Regulations to control the movement out of Australia of capital in the form of securities and currency.

Export licences are issued subject to terms and conditions specified in the Banking (Foreign Exchange) Regulations, and may be subject to such further terms and conditions as are determined, or may be free from terms and conditions. On the receipt in Australia by the Reserve Bank, or by a bank acting as agent for that Bank, of advice that the foreign currency has been paid to the Reserve Bank or to an agent of the Bank in payment for goods exported in accordance with a licence granted under the regulations, the Bank, or an agent of the Bank, pays the licensee, or such other person as is entitled to receive it, an amount in Australian currency equivalent to the foreign currency received. In addition to commercial transactions involving exports, movements of personal effects are also controlled. Residents of Australia, leaving for overseas are required to obtain a licence to cover their bona fide personal and household effects where the total value exceeds $10,000 or where the articles are to be sold abroad. Non-residents require a licence if articles acquired in Australia exceed $10,000 in total value.

Export incentives. The Commonwealth Government provides financial incentives to encourage exports. Under the *Export Market Development Grants Act* 1974 a new scheme (Export Market Development Grants Scheme) was introduced to operate for five years from 1 July 1974. The scheme administered by the Export Development Grants Board which is responsible to the Minister for Overseas Trade is designed to encourage exporters and potential exporters to seek out and develop overseas markets. The scheme covers exporters of primary products, industrial goods, services, know-how and industrial property rights, whether the exporter is an individual, partnership, company or marketing organisation.

The scheme operates by way of taxable grants, to a maximum of $100,000 (and in certain circumstances to $125,000), in relation to eligible expenditure incurred on overseas market research and development.

The Export Market Development Grants scheme replaces the previous Exports Incentive Grants and Market Development Allowance scheme.

Trade descriptions

The Commerce (Trade Descriptions) Act 1905, administered by the Bureau of Customs of the Department of Business and Consumer Affairs, gives power to require the application of a proper trade description to certain prescribed goods imported into or exported from Australia. Goods which must bear a prescribed trade description upon importation into Australia are specified in the Commerce (Imports) Regulations. As regards exports from Australia, marking requirements are prescribed in regulations issued under the Act and relating to specified export commodities.

Government authorities

Industries Assistance Commission

The Industries Assistance Commission is a statutory authority whose general purpose is to advise the Commonwealth Government on the assistance which should be given to domestic industries. This advice is given in public reports which are based on public inquiries into the industries concerned. The Commission formally came into existence on 1 January 1974, as a result of the passing of the *Industries Assistance Commission Act* 1973.

Industries in the primary, secondary or tertiary sectors can be referred to the Commission by the Government, and numerous different forms of assistance can be examined by the Commission. In addition, matters not directly involving assistance, such as the reduction of import duties for the purpose of international trade agreements, can be referred to the Commission. The Act requires the Industries Assistance Commission to report annually to the Government on the operation of the Commission and on the general structure of industry assistance in Australia and its effect on the economy.

There are certain matters which the Minister is required to refer to the Commission for inquiry and report, before action is taken by the Government. These are, basically, proposed variations in the long-term assistance afforded industries in the primary or secondary sectors of the economy. 'Long-term assistance' in this context means assistance which is provided by means of tariffs or other restrictions on imports; or financial assistance which extends over a period of two years or more. The Commission itself has the power to initiate inquiries into those industries whose assistance has not been reviewed for at least ten years, in the case of industries assisted by means of duties on imports, or at least six years in the case of industries assisted by other means.

The Act states that the Commission shall consist of from five to nine Commissioners, appointed by the Governor-General for renewable terms of up to five years. It provides also for the appointment of Associate Commissioners, either for the purpose of particular inquiries or, like the Commissioners, for renewable terms of up to five years. The Commissioners are supported by an office which is staffed by members of the Commonwealth Public Service.

The Commission is required to hold public hearings during the course of its inquiries into individual industries. These hearings, which are advertised widely throughout Australia, are open to the public.

Temporary Assistance Authority

The *Industries Assistance Commission Act* 1973 provided for the creation of a Temporary Assistance Authority comprising not more than three persons. The function of the Temporary Assistance Authority is to inquire into and report on the need for urgent action to protect particular industries against import competition. This action can take the form of temporary duties or restrictions on imports. The Temporary Assistance Authority is required to report to the Minister within thirty days of being asked to undertake an inquiry. However, before taking action on the Authority's report the Minister is required first to refer the question of any permanent change in protection against imports to the Industries Assistance Commission for inquiry and report. Temporary protection recommended by the Authority may operate for a period of up to three months after the date of receipt of the final report by the Industries Assistance Commission on the goods concerned.

Trade Agreements

Multilateral—General Agreement on Tariffs and Trade

The General Agreement on Tariffs and Trade (GATT), which came into force on 1 January 1948, is a multilateral trade treaty designed to facilitate trading relations between participating countries by reducing tariff and other barriers to the free interchange of goods. The Agreement provides a framework within which negotiations can be held to reduce barriers to trade, and a structure for embodying the results of such negotiations in a legal instrument. Features of the Agreement are the schedules of tariff concessions participating countries have negotiated with each other, the application of most-favoured-nation tariff treatment among the participants, the avoidance of other trade discrimination, and a code of agreed commercial policy rules for international trading. Each participating country retains the right; (*a*) to impose new or increased duties for protective purposes, except in respect of particular products where rates of duty have been bound against increase in negotiations under the Agreement; (*b*) by negotiation to modify or withdraw concessions formerly agreed; (*c*) to impose import restrictions to protect the balance of payments; (*d*) to take emergency action where any industry is endangered by reason of any obligation incurred under the Agreement.

There have been six main tariff negotiations under the provisions of the Agreement, and a number of smaller scale negotiations preceding the accession of individual countries. As a result the tariff rates for a great many items entering into world commerce have been reduced and/or bound against increase. Australia has obtained tariff concessions from individual countries on a number of its principal or potential exports to them, as a result both of direct negotiation by Australia and of negotiation by other countries. In the latter case the benefits occurred through the operation under the Agreement of the most-favoured-nation principle. The sixth series of trade negotiations, the Kennedy Round, was based on a plan for linear tariff cuts by industrial countries on all industrial products, with a minimum of exceptions, and on the reduction of non-tariff barriers to trade and the creation of acceptable conditions of access to world markets for agricultural products. It concluded in June 1967 after three years of negotiations. Concessions were negotiated on trade valued at over $36,000 million. The average reductions in tariffs on industrial goods was roughly one-third, while in agriculture the most important item was the agreement reached on the basis for a new world grains arrangement. (*See* the chapter Rural Industry.) Overall results were substantial, but were unevenly spread in that efforts to reduce trade barriers were very much more successful for manufactures than for primary products. In the post-Kennedy Round period, therefore, Australia placed particular emphasis on the work of the Committee on Agriculture, created in November 1967, to examine the problems in the agricultural sector.

An Anti-Dumping Code, negotiated during the Kennedy Round, came into force on 1 July 1968. The Code interprets the provisions of Article VI of the GATT and lays down rules on the determination, investigation and counter-action of injury caused by the dumping of goods on world markets. The rules aim to ensure the greatest possible uniformity of practice by signatory governments. Code signatories enact national legislation to give effect to the international agreement and this legislation embraces the provisions and wording of the Code, though to varying extents depending on the particular country. Australia acceded to the Code in November 1975.

A new round of multilateral trade negotiations (the seventh) was inaugurated at Tokyo in September 1973. Some 92 countries, members and non-members of GATT are participating in the negotiations which are scheduled to conclude in 1977. In a Declaration adopted at the Tokyo conference it was agreed that the principal areas of negotiation should be the reduction of tariff and non-tariff barriers (e.g. import restrictions, export restraints, minimum price regulations and subsidies) to trade in agricultural and industrial products; and safeguard measures against disruption of domestic industries by imports. The problems of developing countries are to be given special treatment. Australia is actively participating in all stages of the negotiations.

Up to the end of 1975 the contracting parties had held thirty-one sessions, nearly all in Geneva, to deal with matters arising from the administration of the Agreement. As a general rule the contracting parties meet once a year, although in a few instances they have met twice. In 1960 a Council of Representatives was established to undertake work, both of an urgent and of a routine character, between the regular sessions of the contracting parties. Some of the provisions of the Agreement were revised in 1954 and 1955. The revised Agreement contains tighter provisions on non-tariff barriers to trade, and allows more freedom for countries to revise individual tariff items which had been bound against an increase in tariff negotiations under the Agreement.

Since GATT has not been accepted definitively, the Agreement is at present being applied provisionally pursuant to a Protocol of Provisional Application. On 1 January 1976, eighty-three countries were full contracting parties to the Agreement, three had acceded provisionally, and nineteen applied the Agreement on a *de facto* basis. These 105 countries account for around 85 per cent of world trade.

Increasing attention has been focused in GATT on specific trade and development problems of developing countries, and in February 1965 a new Part IV of GATT, aimed at helping developing countries solve these problems, was introduced on a *de facto* basis. It entered legally into force in June 1966. The new Part IV embodies commitments to individual and joint action by contracting parties, aimed at ensuring that the developing countries can increasingly find the means to raise standards of living and promote rapid economic development through participating in international trade and achieving sustained growth of their export earnings.

Arising from the commitments entered into under Part IV of GATT and proposals emanating from the United Nations Conference on Trade and Development (UNCTAD), Australia introduced a system of tariff preferences for developing countries in 1966. The aim of the system was to help developing countries to export products to Australia in cases where their industries were not fully competitive. Australia's initiative in this field required a waiver of the GATT "no new preference" rule. All other developed counties have since introduced some form of "Generalised System of Preferences" (GSP) for developing countries. A GATT waiver was provided to enable these systems to be introduced. On 1 January 1974 Australia modified and expanded its system of preferences so that it came under the GATT waiver for the GSP. The system now includes all manufactured, semi-manufactured and processed primary products except for products subject to revenue duties and those where developing countries are already competitive. An initial margin of preference, 10 percentage points below the general tariff rate, is provided. It is proposed to regularly review the margin of preference with a view to further reducing the rate of duty on imports from developing countries until imports are competitive. Some forty products receive preference only in respect of pre-determined quantities or values, i.e. quotas. The system is non-reciprocal (in that Australia seeks nothing in return) and is subject to international supervision through the GATT. It also contains safeguards for Australian industry whereby preferences on individual products can be modified or withdrawn if serious injury is occurring or threatened.

A four-year Arrangement Regarding International Trade in Textiles was negotiated under the auspices of GATT toward the end of 1973 and came into force on 1 January 1974. The Arrangement succeeds the Long Term Arrangement Regarding International Trade in Cotton Textiles which operated from 1962 to 1973. World trade in textiles has for many years been characterised by numerous discriminatory restrictive import measures designed to avoid market disruption from low-cost imports. The Textiles Arrangement aims to avoid situations of market disruption and to lead to the gradual liberalisation of trade in textiles. A surveillance body has been established under the Arrangement to review import restraints and to make recommendations where it considers the restraints to be inconsistent with the Arrangement. Australia acceded to the Arrangement in April 1974.

Bilateral agreements

Britain. The original United Kingdom/Australia Trade Agreement (Ottawa Agreement) came into effect on 20 August 1932. The provisions and history of the Agreement were published in Year Book No. 43, page 329. The latest Agreement, the United Kingdom/Australia Trade Agreement

(U.K.A.T.A.) arose from the re-negotiation of the Ottawa Agreement to correct an imbalance in trade which had developed in Britain's favour. It came into effect on 9 November 1956 and superseded the Ottawa Agreement. (*See* also Year Book No. 51, page 495.)

Briefly, U.K.A.T.A. provided for duty-free access for most products and preferences on a range of Australian products imported into Britain, in return for commitments with regard to the setting of tariff levels and preferential tariff treatment for British goods imported into Australia.

Following British entry into the European Economic Commity U.K.A.T.A. was terminated on 31 January 1973.

Canada. The 1960 Canada/Australia Trade Agreement provides not only for each side to give the other preferences on specific goods but also for the exchange of preferences in each country's tariff derived from the preferential agreements that each had with Britain. The termination of these agreements with Britain created a need for Canada and Australia to review their own preferential trading arrangements. Each country was at the same time experiencing a growing need for greater flexibility in tariff making. An Exchange of Letters governing the future operation of the 1960 Agreement was completed between Canada and Australia on 25 October 1973. The Exchange provides for a continuation of the tariff preferences exchanged under the 1960 Agreement, but on a more flexible basis, and also modifies certain other provisions of the 1960 Agreement, particularly those relating to indirect shipment of goods and to anti-dumping procedures. In general, understandings included in the Exchange remain in force for an initial period of one year and may thereafter be terminated upon 30 days notice. The Agreement itself continues subject to six months' notice.

New Zealand. The New Zealand/Australia Free Trade Agreement came into force on 1 January 1966 subject to a minimum non-termination period of ten years. The Agreement provides for free trade in certain scheduled goods. Provision is made for the progressive addition of items to the schedule. The provisions of the 1933 Trade Agreement between Australia and New Zealand continue in force as part of the Free Trade Agreement, except as superseded or modified by it.

Under the 1933 Agreement each country accorded British Preferential tariff treatment to the other's goods with certain exceptions.

Following the termination in January 1973 of the Trade Agreements which they had with Britain, Australia and New Zealand entered into an arrangement on 7 May 1973 to guarantee tariff preference in each other's market. The agreement was extended from 1 January 1976 for a further ten years after which either party may call for its termination.

The Agreement provides for Australia to maintain a minimum margin of 15 per cent for New Zealand goods and/or New Zealand to maintain a minimum margin of 10 per cent for Australian goods in cases where the tariff is protective. In the case of a non-protective item a minimum margin of 5 per cent is to be maintained. The Agreement also provides that neither country will raise tariffs against the other beyond the levels of 31 January 1973 unless there are protective reasons or revenue considerations.

Papua New Guinea. A Memorandum of Understanding Relating to Interim Trade and Commercial Arrangements between Australia and Papua New Guinea was signed on 20 December 1973. The Memorandum of Understanding provides that Papua New Guinea will continue to receive preferential treatment in the Australian tariff and that Australia will receive most-favoured-nation treatment in Papua New Guinea. It also provides for the encouragement and protection of Australian investment in Papua New Guinea and for Australia to provide assistance to Papua New Guinea in trade promotion and training in the trade policy and promotion area. The Memorandum of Understanding will operate until a long term trade agreement is negotiated between Australia and Papua New Guinea.

Malaysia. A trade agreement with the then Federation of Malaya came into force in August 1958. Under the Agreement Malaya undertook to accord to Australia preferences on certain specified goods, to extend to Australia any other preferences in the Malaysian tariff and to protect Australian wheat and flour against dumped or subsidised competition. Australia undertook to accord preferences to Malaya on certain specified goods and to protect Malaysian tin and rubber against dumped or subsidised competition, guaranteed free entry for natural rubber so long as the Papua New Guinea crop was absorbed, and assured the Federation that natural rubber would not be at a disadvantage compared with synthetic rubber in respect of tariff or import licensing treatment. In February 1975 an Exchange of Letters was signed which placed the preferential provisions of the Trade Agreement on a more flexible basis to allow tariff adjustments to be made by either country.

Democratic Republic of Viet Nam. The trade agreement with the Democratic Republic of Viet Nam was signed on 26 November 1974. The agreement provides for the exchange of most-favoured treatment and for the facilitation of trade. It also expresses support for the principle of long term commercial contracts and includes indicative lists of goods each country is interested in exporting to the other.

Indonesia. A trade agreement between Indonesia and Australia came into force on 1 July 1959. This agreement was re-negotiated in 1972. The new agreement, signed on 14 November 1972, is a most-favoured-nation agreement which establishes the GATT principles as the basis governing the conduct of bilateral trade. The agreement expresses support for international commodity agreements, encouragement of Australian investment in Indonesia and activities by Australian consultants and contractors. Other provisions refer to Australian support for trade initiatives in the Association of South East Asian Nations (ASEAN) and to consultation on shipping matters.

Iran. The trade agreement with Iran was signed in Canberra on 25 September 1974. The agreement provides for both countries to take appropriate measures to facilitate, strengthen and diversify trade and to encourage and facilitate industrial and technical co-operation and trade promotion activities. It also expresses the support of the two governments for the conclusion of long-term commercial contracts. The agreement establishes a committee of representatives to meet annually to review the implementation and further the objectives of the agreement.

Japan. An Agreement on Commerce between Australia and Japan was signed on 6 July 1957, and formally ratified on 4 December 1957. It was provided that the Agreement would remain in force until 5 July 1960, and thereafter unless prior notice of termination should be given by either Government. The agreement provides that each country shall extend most-favoured-nation treatment to the other in respect of customs duties and similar charges, and import and export licensing. Japan is not entitled to claim the benefit of preferences accorded by Australia to Commonwealth countries and dependent territories. Japan also gave certain specific commitments on some important Australian export commodities.

Following a review of the agreement, a Protocol of Amendment was signed on 5 August 1963 and formally ratified on 27 May 1964. Under the Protocol Australia agreed to withdraw action against Japan under Article XXXV of the General Agreement on Tariffs and Trade and thus a full GATT relationship was established between the two countries.

The specific undertakings agreed in 1957 lapsed and the following commitments were entered into.

Japan has:

(*a*) undertaken not to accord less favourable import treatment (apart from tariff) for raw wool than for raw cotton,
(*b*) stated that it has no present intention of imposing a duty on wool,
(*c*) undertaken to continue imports of Australian soft wheat at a stabilised level, and to purchase Australian hard wheat* when necessary requirements are met,
(*d*) stated that it will endeavour to expand opportunities for imports into Japan of Australian sugar, canned meat, leather, motor vehicles, butter, and cheese.

Australia has:

(*a*) undertaken to consult Japan on temporary protection cases affecting Japanese products (in such consultations Japan will consider whether the need for temporary protection can be obviated by measures taken in Japan),
(*b*) stated that equal opportunities of fair and equal competition are accorded to Japanese products in Australian Government purchases overseas.

The new agreement became effective for three years from the date of ratification (27 May 1964) and thereafter subject to three months notice of termination by either Government.

China (excl. Taiwan Province). The Australia-China Trade Agreement was signed in Canberra on 24 July 1973. The agreement provides for reciprocal most-favoured-nation treatment, while recognising existing preferences. It expresses support for the conclusion of bilateral commercial long-term commodity contracts, encourages trade promotional activities in both countries and established a Joint Trade Committee to examine the implementation of the agreement and to explore measures aimed at the expansion of mutually beneficial trade.

Philippines. The trade agreement with the Philippines signed in 1965, has been re-negotiated and a revised agreement was signed in Manila on 25 June 1975. It provides for reciprocal most-favoured-nation treatment and expresses support for international commodity agreements and for the conclusion of long-term commercial contracts. The agreement also provides for encouragement and facilitation of Australian investment in the Philippines and of industrial and technical co-operation. Other provisions refer to Australian support trade initiatives in the Association of South East Asian Nations (ASEAN) and establish a Joint Commission between the two countries to meet annually to further the objectives of the agreement.

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* 'Soft' wheat is fair average quality wheat; 'hard' wheat is premium grade wheat similar to that grown in North America.

Republic of Korea. A Trade Agreement between the Republic of Korea and Australia was signed on 21 September, 1965. This Agreement was re-negotiated in 1975. The new Agreement, signed on 17 June 1975, provides for reciprocal most-favoured-nation treatment and expresses support for international commodity agreements and for the conclusion of long-term commercial contracts. The Agreement also provides for the encouragement of industrial and technical co-operation and for the encouragement of trade promotional activities in both countries. A Joint Trade Committee was also established under the agreement to meet annually to advance the objectives of the agreement.

U.S.S.R. Australia signed a trade agreement with the U.S.S.R. on 15 October 1965 and an additional agreement on the Development of Trade and Economic Relations on 16 March 1973. The 1965 Agreement provides for the exchange of most-favoured-nation treatment. The 1973 Agreement indicates commodities of export interest to each country respectively, and established a mixed commission of flexible composition to discuss trade problems and explore means for the expansion of trade and economic co-operation.

German Democratic Republic. The trade agreement with the German Democratic Republic was signed on 28 February 1974. It provides for the exchange of most-favoured-nation treatment, the encouragement and facilitation of trade and of economic, industrial and technical co-operation. It includes indicative lists of goods each country is interested in exporting to the other. The agreement also established a mixed commission to review the state of trade and discuss measures for its expansion.

Czechoslovakia. An agreement on trade relations was signed with Czechoslovakia on 16 May 1972. This confirmed the exchange of most-favoured-nation treatment as contracting parties to the GATT and established a Joint Trade Committee to discuss trade problems and examine prospects for the growth of trade between the two countries.

Poland, Bulgaria, Romania, Hungary and Yugoslavia. Australia has signed trade agreements with Poland (20 June 1966), Bulgaria (22 June 1966), Romania (18 May 1967), Hungary (5 December 1967) and Yugoslavia (21 July 1970). These agreements provide for the exchange of most-favoured-nation treatment; for payments to be in convertible currency, and for consultations on trade matters to be held at the request of either Government.

Trade services

Trade Commissioner Service

The stimulation of interest abroad in Australia's exports is an important government activity in which the Australian Trade Commissioner Service plays a prominent part. A brief account of the establishment and growth of the Trade Commissioner Service before the 1939–45 War is available in Year Book No. 51, page 496. Since the War the service has increased steadily. By early 1976 there was an establishment of 173 Trade Commissioners and Assistant Trade Commissioners in Australia and in 60 posts in 46 countries.

Trade Commissioners are responsible for commercial intelligence in their territories. Particular facilities provided for Australian exporters and export organisations include: surveys of market prospects; advice on selling and advertising methods; arranging introductions with buyers and agents; providing reports on the standing of overseas firms; advice and assistance to business visitors; helping to organise and carry through trade missions, trade displays, newspaper supplements, and other promotion and publicity media; providing information on import duties, import licensing, economic conditions, quarantine and sanitary requirements, and other factors affecting the entry and sale of goods; helping to attract desirable investment.

In some countries Trade Commissioners also participate in inter-governmental negotiations in the economic and commercial fields. In certain countries where there is no diplomatic or consular mission Trade Commissioners are called upon to act as the Australian representative.

Trade Commissioners, Assistant Trade Commissioners and Trainee Trade Commissioners are drawn from both private enterprise and the public service. Applications for entry are invited periodically by public advertisement. Recruitment is generally at the Trainee Trade Commissioner and Assistant Trade Commissioner level and officers are promoted to higher grades or to Trade Commissioner as experience and performance warrant. In the majority of posts the Trade Commissioner is supported by an Assistant Trade Commissioner and, in some cases, also by another Trade Commissioner.

The Trade Commissioner Service is administered by the Department of Overseas Trade (as distinct from the diplomatic and consular services administered by the Department of Foreign Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Minister Commercial, Commercial Counsellor, Commercial Secretary or Commercial Attache).

The overseas trade representation is shown in the chapter International Relations.

Trade Missions

Since 1954 the Commonwealth Government has sent trade missions abroad as part of its trade promotion program. The experience acquired has indicated the need for flexibility in techniques to suit particular products or markets. At present the following types of trade missions are in use.

Survey missions. These are organised to obtain precise knowledge about the export trade potential for specific products in one or more overseas markets. Such methods are used to explore export prospects in new or developing areas where commercial intelligence is not readily available or where a complex industry is involved and the industry requires special export knowledge.

Specialised and general trade missions. Arrangements are made for specific industries or groups of firms representing a number of industries to participate in a planned selling campaign in overseas markets with known sales potential. The mission visits the market, publicises its products and negotiates sales.

Up to the end of December 1975 Australia has sent overseas 110 trade and survey missions and 5 trade ships.

Trade displays, fairs, exhibitions and store promotions

For many years Australia has participated in numerous major trade fairs, exhibitions and displays in Africa, Asia, Europe, the Americas and the Pacific Area.

Initially the emphasis was on participation in general trade fairs directed at the public and the general commercial community. With the development of export promotion techniques and the greater diversity of goods available for export, greater emphasis is now being placed on individual Australian trade displays and participation in specialised trade shows directed almost entirely at the business community. In addition, display rooms in Trade Commissioner offices are currently in use in Singapore, Kuala Lumpur, Manila, Hong Kong, Jakarta and Port Moresby.

Market assistance

The Commonwealth Government established a Market Assistance Section in the Department of Overseas Trade in January 1974 to advise and assist developing countries and countries with centrally planned economies in the marketing of their products in Australia. The section, which is located in Canberra, is supported by two experienced Australian Trade Commissioners, one located in Sydney and the other in Melbourne, to maintain contact with the commercial sector and provide direct practical assistance.

Export of consulting services

Australian professional consultants have been increasingly successful in obtaining overseas commissions and are making a significant contribution to Australia's foreign exchange earnings.

The consultants are representative of a wide range of disciplines, including engineering, architecture, agriculture, mining, management, surveying, quantity surveying and urban and regional planning.

Most opportunities for Australian professional consultants arise through development projects financed by international aid and lending organisations such as The World Bank Group (IBRD, IDA and IFC), the Asian Development Bank, the United Nations Development Program and its executing agencies.

However, increasing opportunities are being developed successfully by Australian consultants in the Middle East, funds for which are provided by O.P.E.C. Australian consultants are also receiving commissions under Australia's External Aid Programs and from the private sector, particularly in South-East Asia.

Consulting Services Feasibility Study Fund

The above fund was established in 1973 to finance feasibility studies in developing countries which would be carried out by Australian professional consultants in a wide range of disciplines.

Only those studies officially requested and included in country development plans will be considered by the interdepartmental committee which advises the Minister for Overseas Trade as to which studies might be undertaken and the consulting firm which should be commissioned to carry them out.

The objective of the fund is to assist the promotion of the export of Australian consulting services.

Construction contracts overseas

The Australian Overseas Construction Council, which was formed by the Master Builders' Federation of Australia and the Australian Federation of Construction Contractors, assists construction contractors to win contracts overseas. It has close liaison with the Department of Overseas Trade, which provides information on construction opportunities abroad.

Australian construction contractors are active in the South-East Asian market and are also operating in the Pacific Area. There is also developing interest in opportunities in the Middle East.

Contracts being won are financed not only by the private sector but also those financed by international lending institutions.

Export Finance and Insurance Corporation

The Export Finance and Insurance Corporation was established by the Commonwealth Government in 1975 to provide Australian exporters with a specialised range of insurance guarantee and finance facilities not normally available from commercial sources. E.F.I.C. took over the functions of the Export Payments Insurance Corporation which had been operating since 1956.

The main risks of loss against which the Corporation insures are the 'commercial' risks of insolvency or protracted default of the buyer and 'political' risks. The latter include exchange transfer difficulties; the imposition of Government regulations which prevent the import of the goods into the buyer's country; war, revolution or civil disturbance in the buyer's country. For most 'political' risks insurance cover is available to a maximum of 90 per cent of the amount of loss in the pre-shipment period and a maximum of 95 per cent in the post-shipment period. The rate of cover for 'commercial' risks is fixed at 90 per cent.

Several important additions to the Corporation's facilities have been made since its inception. In 1964 the Corporation was authorised to issue guarantees of payment to commercial lending institutions on money raised for the purpose of financing exports. A further facility, buyer credit, under which the Corporation provides its guarantee in respect of funds made available by lending institutions direct to the overseas buyer was added in 1971. At the same time, re-insurance facilities were introduced and the Corporation is now able to enter into re-insurance agreements with its overseas counterpart institutions on export contracts with a substantial foreign content. The establishment of E.F.I.C. in 1975 introduced an export finance facility to the range of facilities available to exporters. The finance facility is designed to assist Australian exporters of capital goods and associated services by providing export finance on internationally competitive terms.

The Corporation may submit to the Government for consideration in the national interest applications for payments insurance, guarantees of finance which are commercially unacceptable to the Corporation. In considering such applications the Government takes account of both political and economic factors.

The majority of the Corporation's business relates to payments insurance for exports sold on short or medium term supplier credit (i.e. insured credit being extended to the overseas buyer by the exporter with the financial support of private lending institutions). At 30 June 1976 the Corporation had 1,015 policies current on its commercial account (i.e. not including Government business) with a face value of $1,163 million. The Corporation has issued policies covering exports to over 150 countries and has insured a wide range of Australian exports. Since the introduction of its finance facility the Corporation has provided concessional finance in support of successful contracts totalling $26.5 million.

In addition to providing the above facilities, the Corporation insures eligible Australian investments in overseas countries against the main non-commercial risks associated with investing overseas e.g. expropriation, exchange transfer difficulties, and war damage. For an investment to be eligible it must confer benefits on both Australia and the host country. At 30 June 1976, 57 investments mainly in South-East Asia had been insured. The face value of these insurance policies was $81.7 million.

A Board, composed of representatives of a wide range of exporting interests and service industries and of Government and including two full-time officers of the Corporation, controls and directs the operations of E.F.I.C. The Board meets regularly and members are appointed for a term not exceeding three years.

Collection and presentation of statistics

Basic documents and scope of overseas trade statistics

Overseas trade statistics are compiled by the Australian Bureau of Statistics from copies of export and import entries submitted by exporters and importers or their agents to the Bureau of Customs as required by the Customs Act. The statistics are not confined to goods which are the subject of a commercial transaction and all goods moving into or out of Australia are recorded, except for those exclusions listed below. Among the items included are exports and imports on government account including some items of defence equipment, and outside packages (that is, the outside package or outside covering of the goods). Outside packages are included as a separate item in the tabulation of imports but in exports the value recorded for each item includes the value of the outside package.

The following are excluded from overseas trade statistics:

(*a*) Direct transit trade, i.e. goods transhipped in Australian ports in their movement from and to other countries.

(*b*) Bunkers and stores supplied to vessels and aircraft. (However, a separate 'Ships' Stores' collection is made and details are shown on page 346.)

(*c*) Those migrants' and passengers' effects for which a customs entry is not received.

(*d*) Those parcel post exports and imports of small value for which customs entries are not received.

(*e*) Certain materials for intergovernmental defence projects for which customs entries are not required.

(*f*) The value of ores and concentrates exported and imported includes the value of gold and/or silver content. These unseparated metals are thus excluded from gold and silver exported and imported as such.

(*g*) Vessels and aircraft engaged in the transport of passengers or goods between Australia and other countries.

(*h*) Vessels and aircraft purchased for use on overseas routes and any subsequent sales made of such vessels and aircraft.

(*i*) Fish and other sea products landed abroad directly from the high seas by Australian vessels.

Areas applying

The area to which all overseas trade statistics issued by this Bureau apply is the whole of the Commonwealth of Australia, comprising the six States, the Northern Territory and the Australian Capital Territory. Non-contiguous territories under Australian administration are treated as outside countries. Trade transactions between Australia and those non-contiguous territories are part of the overseas trade of Australia and are published separately in Australia's overseas trade statistics.

Period covered by the statistics

Exports and imports are recorded statistically in the month in which the entries are passed by the Bureau of Customs. Normally this is within a few days of loading or discharge of cargo. Delay sometimes occur in the lodging of export entries and import entries may be cleared early using the Customs' check-to-arrive system.

Containerised goods

Containerised goods forwarded interstate for export through a container terminal are statistically recorded as being exported from the port of location of the Customs House at which the entry was lodged and not necessarily from the port of loading in Australia. For example, containerised goods for which entries were lodged at the Customs House, Port Adelaide, but forwarded interstate to Port Melbourne for export would be recorded statistically as exports from Port Adelaide, hence from South Australia and not Victoria. The same method of recording applies to imports of containerised goods forwarded interstate following discharge from an overseas vessel.

Valuation

Commencing with the Bureau publications issued at the close of 1965 values in overseas trade statistics have been expressed in $A. Prior to this values were expressed in £ (Aust.) except for imports into Australia which, up until 15 November 1947, were recorded in British currency values. Full explanatory notes on the methods of recording import values before and since 15 November 1947 were included in Year Book No. 37, page 396.

All values in overseas trade statistics are determined on a 'free on board (f.o.b.) port of shipment' basis. This means that all charges (in particular the cost of freight and insurance) incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred, or usually incurred, prior to export are included in the determination of trade values.

The procedure adopted to value exports and imports is as follows:

Exports. The recorded value of goods exported includes the cost of outside packages and has been determined, since July 1937, as follows:

(*a*) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

(*b*) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are despatched for sale.

An account of the bases of valuation in operation prior to July 1937 is given on page 396 of Year Book No. 37.

Imports. The recorded value of goods imported is the amount on which duty is payable or would be payable if the duty were *ad valorem*. Value for duty of any goods shall be the sum of (*a*) and (*b*) below, i.e.:

(*a*) the higher of—

(i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction ('special deduction' is defined as any discount or other deduction allowed to the Australian importer which would not ordinarily have been allowed to any and every purchaser at the date of exportation of an equal quantity of identically similar goods); or

(ii) the current domestic value of the goods ('current domestic value' is defined as the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country);

and

(*b*) all charges payable or ordinarily payable for placing the goods free on board at the port of export.

In the case of goods consigned for sale in Australia the 'value for duty' shall be the amount which would be the value for duty if the goods were, at the date of exportation, sold to an Australian importer instead of being consigned for sale in Australia.

Leasing arrangements. The recorded value of goods exported, or imported under leasing arrangements is defined as the free on board value, i.e. not the value of the lease receipts or payment. However, for balance of payments purposes, large items of equipment under lease are normally excluded from export and import figures and, therefore, from the balance of trade since no change of ownership has occurred.

Quantity data

Where quantities are shown they are generally expressed in terms of the normal unit of quantity appropriate to the industry.

Statistical concepts of trade

Trade systems. There are two generally accepted systems of recording overseas trade statistics defined by the Statistical Office of the United Nations, that is 'special trade' and 'general trade'. The definitions for these are shown in Year Book No. 57 and earlier issues. This terminology is not usually employed in connection with Australian overseas trade statistics and the terms defined below are in customary use.

Exports of Australian origin are goods, materials or articles which have been produced, manufactured or partly manufactured in Australia, except goods which were originally imported and have undergone only repair or minor operations which leave them essentially unchanged.

Re-exports are goods, materials or articles originally imported which are exported either in the same condition in which they were imported or after undergoing repair or minor operations which leave them essentially unchanged. 'Minor operations' include blending, packaging, bottling, cleaning, sorting, husking and shelling.

Total exports are the aggregate of exports of Australian origin and re-exports.

Import clearances are imported goods cleared through Customs direct for domestic consumption plus goods cleared from bonded warehouses for domestic consumption (these are comparable to 'special trade').

Imports are the combined total of goods imported direct for domestic consumption and imports into bonded warehouses (these are comparable to 'general trade').

Merchandise and non-merchandise trade. Total trade is divided into merchandise and non-merchandise trade in accordance with international standards recommended by the United Nations. Merchandise trade is the equivalent of total exports or imports less certain items specified as non-merchandise. A complete description of the commodities included is contained in the *Australian Export and Import Commodity Classifications* (8.3, 8.6) published by the Australian Bureau of Statistics.

Balance of trade and balance of payments

The balance of trade is derived by comparing statistics of exports on a balance of payments basis with statistics of imports on that basis. Therefore the excess of the value of exports or imports as shown on the basis of total trade in the table on page 333 does not on these bases represent the balance of trade. Statistics of the balance of trade for balance of payments purposes are derived by making certain adjustments, relating to valuation, timing and coverage to statistics of merchandise exports and imports. Information on these statistics will be found in the section relating to the balance of payments, page 356.

Country of consignment or origin

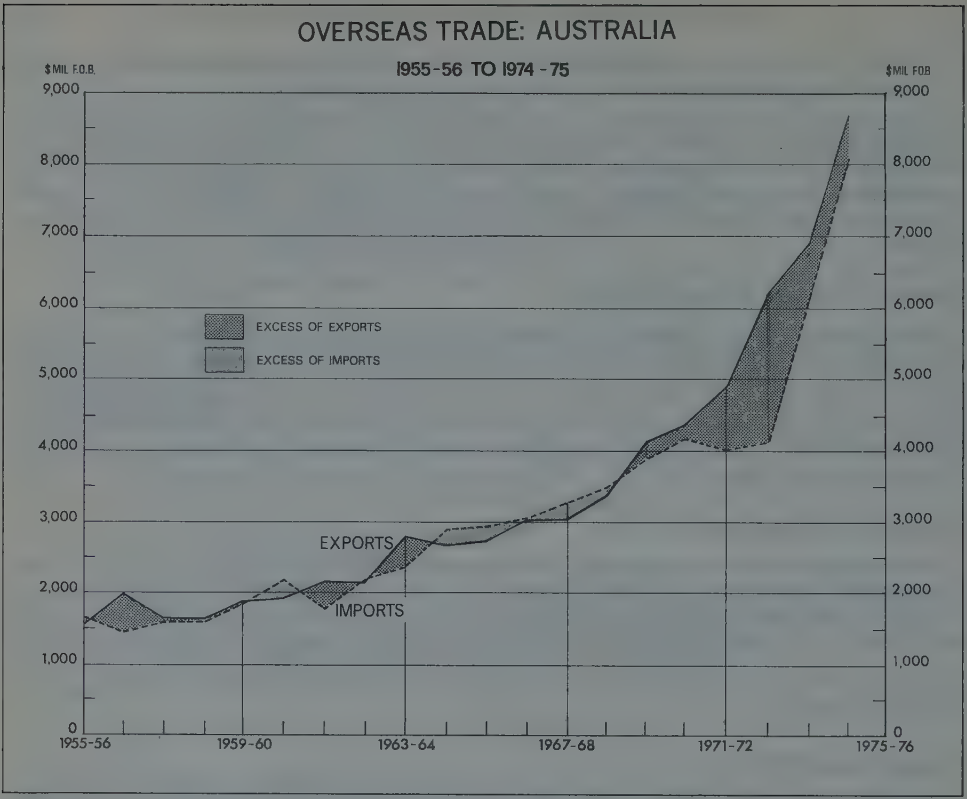
'Country of consignment' referred to in export tables means the country to which goods were consigned at the time of export. Where the country of consignment is not determined at the time of export the goods are recorded as exported 'For orders'. 'Country of origin' referred to in import tables means the country of production as determined for tariff purposes. Classification of imports according to country of shipment was discontinued after the year 1920–21. A brief account of the dual system of import classification by country operating prior to the year 1921–22 is given on page 500 of Year Book No. 51.

Commodity classifications

Exports and imports are classified according to the Australian Export and Import Commodity Classifications. These classifications are based on the Standard International Trade Classification, Revised (S.I.T.C.—R.), which is closely related to the Brussels Tariff Nomenclature used in the Australian Customs Tariff.

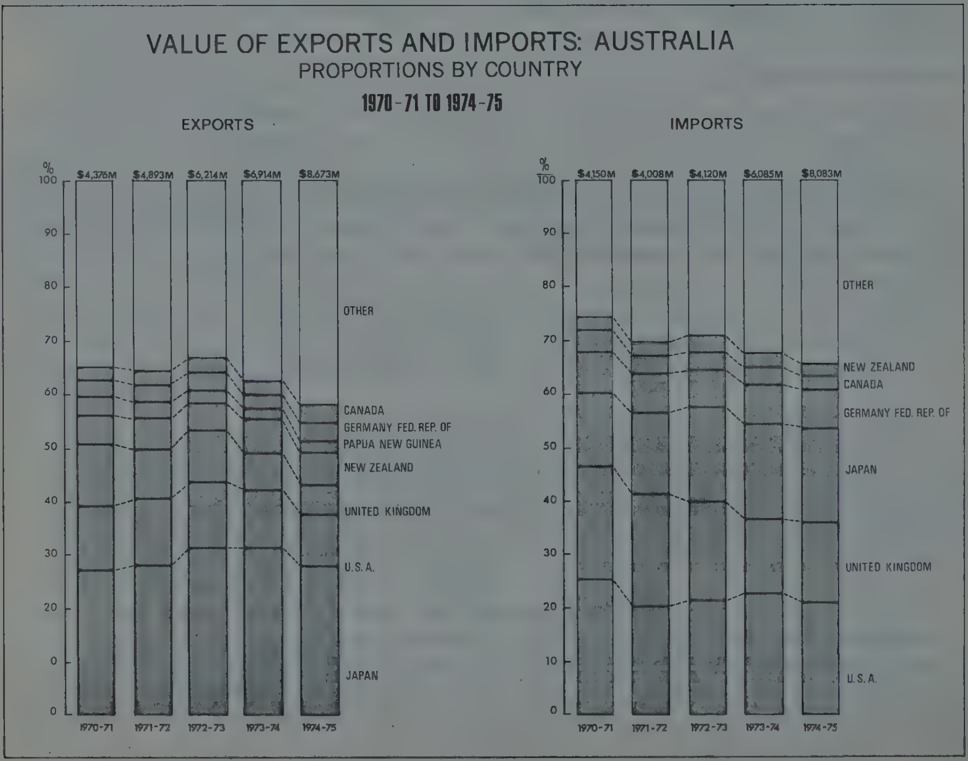
Pre-federation records

In the years preceding federation each State recorded its trade independently and in so doing did not distinguish other Australian States from external countries. The aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, but the results obtained are subject to error, since past records of values and the direction of exports and imports were not on uniform lines. Exports and imports for years prior to federation may be found in early issues of the Year Book, particularly Year Book No. 2. On the introduction of the *Customs Act* 1901 the methods of recording values were made uniform throughout the States.


OVERSEAS TRADE: AUSTRALIA

1955-56 TO 1974-75

PLATE 35


VALUE OF EXPORTS AND IMPORTS: AUSTRALIA

PROPORTIONS BY COUNTRY

1970-71 TO 1974-75

PLATE 36

Total overseas trade

The following table shows the total trade of Australia with overseas countries from 1901 to 1974–75. The period 1901 to 1970–71 has been divided into five-year periods, and the figures shown represent the annual averages for the periods specified. Figures for the individual years were published in earlier issues, but figures for imports in issues prior to No. 37 were expressed in British currency.

OVERSEAS TRADE: AUSTRALIA
(f.o.b.)

Period	Exports	Imports	Excess of exports (+) or imports (−)	Value per head of population: Exports	Value per head of population: Imports
Annual average—	$m	$m	$m	$	$
1901 to 1905	102	71	+ 31	26.2	18.2
1906 to 1910	(a)139	94	+ 45	32.6	22.0
1911 to 1915–16	149	133	+ 16	30.8	27.6
1916–17 to 1920–21	230	183	+ 47	43.8	34.8
1921–22 to 1925–26	269	249	+ 20	45.8	42.2
1926–27 to 1930–31	263	239	+ 24	41.0	37.2
1931–32 to 1935–36	242	148	+ 94	36.2	22.2
1936–37 to 1940–41	315	247	+ 68	45.4	35.6
1941–42 to 1945–46	328	423	— 95	44.8	58.2
1946–47 to 1950–51	1,143	899	+ 244	145.4	114.3
1951–52 to 1955–56	1,572	1,566	+ 6	176.4	175.6
1956–57 to 1960–61	1,811	1,729	+ 82	182.0	173.7
1961–62 to 1965–66	2,492	2,430	+ 62	224.8	218.6
1966–67 to 1970–71	3,591	3,562	+ 29	293.4	291.4
Year—					
1970–71	4,376	4,150	+ 226	343.7	326.0
1971–72	4,893	4,008	+ 885	377.8	309.3
1972–73	6,214	4,121	+2,093	474.4	314.5
1973–74	6,914	6,085	+ 829	521.1	458.6
1974–75	8,673	8,083	+ 590	643.8	600.1

(a) Prior to 1906, ships' stores were included in exports. For value of such goods loaded on overseas vessels and aircraft during each of the years 1972–73 to 1974–75, *see* page 346.

Plate 35 on page 332 shows the overseas trade of Australia from 1955–56 to 1974–75.

The following table shows particulars of merchandise and non-merchandise trade for recent years.

MERCHANDISE AND NON-MERCHANDISE TRADE: AUSTRALIA
($'000 f.o.b.)

EXPORTS

Year	Merchandise: Australian produce	Merchandise: Re-exports	Merchandise: Total	Non-merchandise: Australian produce	Non-merchandise: Re-exports	Non-merchandise: Total	Total
1970–71	4,119,518	123,117	4,242,635	81,428	51,694	133,122	4,375,757
1971–72	4,640,244	133,148	4,773,392	76,173	43,803	119,976	4,893,368
1972–73	5,879,066	193,449	6,072,514	82,359	58,830	141,190	6,213,704
1973–74	6,617,449	140,141	6,757,590	88,956	67,200	156,156	6,913,746
1974–75	8,289,605	197,978	8,487,583	114,782	70,398	185,180	8,672,762

IMPORTS

Year	Merchandise	Non-merchandise	Total
1970–71	4,098,560	51,468	4,150,028
1971–72	3,954,775	53,590	4,008,365
1972–73	4,071,911	48,816	4.120.727
1973–74	6,027,091	57,913	6,085,004
1974–75	7,963,908	119,191	8,083,099

Classified summary of Australian overseas trade

The following table shows exports and imports according to divisions of the Australian Export and Import Commodity Classifications (based on the Standard International Trade Classification, Revised).

EXPORTS AND IMPORTS: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS
($'000 f.o.b.)

Division No.	Description	Exports			Imports		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
00	Live animals	17,084	29,777	26,314	6,795	14,212	15,542
01	Meat and meat preparations	857,021	795,211	443,767	1,421	3,341	4,279
02	Dairy products and eggs	142,015	152,125	165,611	9,116	9,489	12,453
03	Fish and fish preparations	73,605	66,575	69,186	47,657	68,633	62,767
04	Cereals and cereal preparations	421,671	747,473	1,466,399	5,688	6,386	8,037
05	Fruit and vegetables	124,845	111,883	99,208	25,883	50,252	76,862
06	Sugar, preparations, honey	259,798	235,191	660,706	3,264	3,941	8,228
07	Coffee, tea, cocoa, and spices	10,889	9,493	13,303	53,216	63,138	93,257
08	Feeding stuff for animals	22,653	25,040	20,744	6,073	11,164	12,559
09	Miscellaneous food preparations	4,831	6,602	5,018	3,885	6,223	8,512
11	Beverages	11,493	13,009	15,010	24,674	32,073	33,017
12	Tobacco and tobacco manufactures	3,673	4,045	4,128	27,566	32,863	41,549
21	Hides, skins and fur skins, undressed	192,227	150,574	104,197	1,538	2,461	2,418
22	Oil seeds, oil nuts and oil kernels	9,082	5,702	12,505	7,234	19,851	7,260
23	Crude rubber (including synthetic and reclaimed)	764	970	1,086	24,595	43,061	30,973
24	Wood, timber and cork	6,741	8,256	9,192	68,258	115,891	85,284
25	Pulp and waste paper	380	512	560	37,555	46,291	70,992
26	Textile fibres and their waste	1,168,666	1,161,648	762,651	49,721	76,622	43,562
27	Crude fertilisers and minerals (except coal, petroleum and precious stones)	17,239	22,988	28,380	52,643	67,142	117,284
28	Metalliferous ores and metal scrap	699,689	851,907	1,202,903	7,871	19,897	9,802
29	Crude animal and vegetable materials, n.e.s.	21,657	18,390	25,269	18,833	23,735	22,292
32	Coal, coke, and briquettes	294,616	352,301	672,690	485	584	1,851
33	Petroleum and petroleum products	46,374	104,587	161,787	174,703	376,688	722,362
34	Petroleum gases and other gaseous hydrocarbons	(a)	(a)	(a)	68	105	99
41	Animal oils and fats	29,497	40,542	50,070	301	477	578
42	Fixed vegetable oils and fats	211	1,698	2,465	10,745	24,322	36,825
43	Animal and vegetable oils, fats and waxes, processed	890	2,646	3,275	2,066	3,249	5,870
51	Chemical elements and compounds	181,123	229,494	352,147	143,325	212,609	302,695
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	806	2,307	1,952	2,032	2,719	3,358
53	Dyeing, tanning and colouring materials	9,283	10,353	11,657	29,320	40,016	36,894
54	Medicinal and pharmaceutical products	25,994	31,075	32,631	65,012	75,377	105,837
55	Essential oils and perfume materials; toilet and cleansing preparations	11,780	14,846	18,460	18,344	25,213	30,694
56	Fertilisers, manufactured	1,611	1,929	2,789	6,099	6,540	13,105
57	Explosives and pyrotechnic products	2,616	3,121	3,056	4,271	5,040	6,982
58	Plastic materials, regenerated cellulose and artificial resins	10,725	21,320	27,404	105,161	145,211	188,076
59	Chemical materials, n.e.s.	27,503	33,918	28,716	50,596	67,196	98,356
61	Leather, leather manufactures, n.e.s. and dressed fur skins	6,506	4,264	4,450	8,670	11,534	15,030
62	Rubber manufactures, n.e.s.	8,826	10,745	7,744	56,547	83,293	124,187
63	Wood and cork manufactures (excluding furniture)	26,557	43,624	50,149	20,292	35,963	37,783
64	Paper, paperboard and manufactures	17,162	19,337	23,321	121,631	167,431	224,617
65	Textile yarn, fabrics, made-up articles	24,841	30,679	30,924	347,260	579,065	435,707
66	Non-metallic mineral manufactures. n.e.s.	35,082	38,141	48,065	101,115	133,666	152,300
67	Iron and steel	173,365	214,373	381,128	108,663	214,054	251,683
68	Non-ferrous metals	290,995	424,320	502,763	24,224	41,430	51,666
69	Manufactures of metal, n.e.s.	62,210	66,630	102,465	104,448	137,890	202,652
71	Machinery, other than electric	139,786	148,220	235,659	686,798	888,060	1,357,827
72	Electrical machinery and apparatus	62,708	63,735	106,140	277,368	394,328	719,160
73	Transport equipment	295,807	234,293	223,175	525,250	808,962	985,493
81	Sanitary, plumbing, heating and lighting fixtures and fittings	2,810	3,039	3,195	7,848	13,057	16,505
82	Furniture	1,800	1,881	2,528	8,640	18,942	24,413
83	Travel goods, handbags, etc.	288	298	352	8,099	13,533	17,340
84	Clothing and accessories; articles of knitted or crocheted fabric	11,754	11,153	11,440	63,481	122,424	188,826
85	Footwear, gaiters and similar articles	1,216	1,326	1,448	22,584	43,474	50,361
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	35,124	39,360	47,547	138,141	192,474	245,779
89	Manufactured articles, n.e.s.	45,307	44,841	58,140	225,859	317,495	417,417
9(A)	Commodities and transactions not classified according to kind(b)	121,318	89,822	141,709	118,976	108,002	124,650
	Total merchandise	*6,072,514*	*6,757,590*	*8,487,583*	*4,071,911*	*6,027,091*	*7,963,908*
9(B)	Non-merchandise	141,190	156,156	185,180	48,816	57,913	119,191
	Total	**6,213,704**	**6,913,746**	**8,672,762**	**4,120,727**	**6,085,004**	**8,083,099**

(a) Included in Division 9A. (b) Includes Division 34 (Exports only).

Exports, by industrial group

The following table is designed to show fluctuations in exports of Australian produce dissected according to the main industry of their origin, although any such classification is necessarily somewhat arbitrary.

EXPORTS OF AUSTRALIAN PRODUCE, BY INDUSTRIAL GROUP

Industrial group	*Value ($'000 f.o.b.)*			*Proportion of value of exports of Australian produce (except gold) (per cent)*		
	1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Agriculture, horticulture and viticulture—						
Unprocessed	446,312	746,637	1,433,319	7.5	11.2	17.1
Processed	385,003	366,260	824,417	6.5	5.5	9.9
Total	831,315	1,112,895	2,257,736	14.0	16.7	27.0
Pastoral—						
Unprocessed	2,081,894	1,992,189	1,206,802	35.1	29.9	14.4
Processed	176,838	187,832	173,390	3.0	2.8	2.1
Total	2,258,733	2,180,021	1,380,192	38.1	32.7	16.5
Dairy and farmyard—						
Unprocessed	27,122	17,521	13,945	0.5	0.3	0.2
Processed	137,323	147,521	159,951	2.3	2.2	1.9
Total	164,445	165,042	173,896	2.8	2.5	2.1
Mines and quarries (except gold)—						
Unprocessed	944,609	1,133,055	1,753,461	15.9	17.0	21.0
Processed	306,777	430,553	500,135	5.2	6.5	6.0
Total	1,251,386	1,563,608	2,253,596	21.1	23.4	26.9
Fisheries—						
Unprocessed	67,711	62,307	65,282	1.1	0.9	0.8
Processed	7,797	6,634	6,049	0.1	0.1	0.1
Total	75,508	68,941	71,331	1.3	1.0	0.9
Forestry—						
Unprocessed	469	1,265	1,739	0.0	0.0	0.0
Processed	8,670	9,793	10,346	0.1	0.1	0.1
Total	9,139	11,058	12,085	0.2	0.2	0.1
Total primary produce—						
Unprocessed	3,568,117	3,952,975	4,474,548	60.1	59.2	53.5
Processed	1,022,409	1,148,593	1,674,288	17.2	17.2	20.0
Total	*4,590,526*	*5,101,568*	*6,148,836*	77.3	*76.4*	*73.5*
Manufactures	1,204,980	1,380,504	1,933,341	20.3	20.8	23.1
Refined petroleum oils	43,144	100,817	157,443	0.7	1.5	1.9
Unclassified	98,515	89,314	128,135	1.7	1.3	1.5
Total Australian produce (except gold)	**5,937,165**	**6,672,203**	**8,367,756**	**100.0**	**100.0**	**100.0**
Re-exports (except gold)	252,279	207,340	268,376	..	..	..
Gold exports	24,260	34,203	36,631	..	..	..
Total	**6,213,704**	**6,913,746**	**8,672,762**	..	..	..

The items enumerated indicate how arbitrary is the line necessarily drawn between primary produce and manufactures in any classification of this kind. The value of processed primary products exported includes some element of value added by the simpler processes of manufacture, while the value shown for manufactures exported necessarily includes the value of raw materials (primary produce) used in those manufactures.

Exports of principal articles of Australian produce

EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE

Article		Quantity 1972–73	Quantity 1973–74	Quantity 1974–75	Value ($'000 f.o.b.) 1972–73	Value ($'000 f.o.b.) 1973–74	Value ($'000 f.o.b.) 1974–75
Meat, fresh, chilled or frozen—							
Of bovine animals—							
Beef—							
Bone-in	'000 kg	12,291	13,260	21,173	13,509	17,964	13,676
Boneless	,,	542,830	460,953	386,491	609,449	592,619	302,105
Other	,,	27,533	19,106	8,588	29,916	25,551	6,949
Of sheep, lambs and goats	,,	190,186	90,092	102,394	119,664	80,783	65,426
Meat, canned or bottled	,,	23,140	22,612	15,340	17,161	25,507	18,548
Sausage casings (natural)	,,	..	..	..	10,618	6,376	7,776
Other meat (including poultry, game, rabbits)		..	..	..	67,202	52,745	36,565
Milk and cream	'000 kg	92,452	150,490	119,363	45,956	73,539	87.509
Butter	,,	75,463	56,467	32,619	61,986	41,880	33,833
Cheese	,,	29,568	38,031	34,230	21,688	28,936	34.634
Fish (including shell fish) fresh or preserved by cold process	,,	17,282	16,634	14,855	65,641	60,518	63,209
Wheat	tonnes	5,391,031	5,128,150	7,860,069	273 096	517,114	1,034,396
Barley, unprepared	,,	804,122	808,467	1,759,700	38,512	68,463	186,682
Oats	,,	114,534	80,655	267,271	5,016	13,582	19,768
Flour (wheaten), plain white	,,	156,807	129,040	236,716	12,055	20,196	48,993
Fruit, dried—							
Grapes	'000 kg	72,710	27,040	31,726	26,186	17,870	20,120
All other	,,	2,917	1,777	899	2,314	2,110	1,285
Fruit, canned or bottled	'000 cartons	8,273	7,326	4,262	48,223	44,543	32,262
Sugar, the produce of cane	tonnes	2,084,430	1,781,478	1,995,667	249,759	223,313	644,499
Wine	litres	6,246,587	8,466,444	6,546,893	3,970	5,614	5,343
Hides and skins—							
Calf, cattle and horse	'000 kg	117,634	113,926	119,857	77,810	55,298	39,771
Sheep and lamb (excluding pieces)	,,	123,772	72,726	74,212	109,397	91,539	61,664
Timber, wood in the rough, shaped or simply worked	cu m	81,551	74,846	129,504	6,265	8,111	9,010
Wool—							
Greasy	'000 kg	665,069	487,543	456,698	1,064,209	1,062,237	663,870
Scoured or washed, carbonised, tops, noils and waste	,,	38,811	35,116	45,059	66,258	94,327	89,612
Iron ore and concentrates (except roasted iron pyrites)	tonnes	66,293,938	78,290,224	85,315,878	439,138	498,663	706,404
Copper ores and concentrates	,,	164,254	175 136	146,970	34,463	57,324	39,755
Lead ores and concentrates	,,	74,143	77,678	42,192	12,848	19,445	13,223
Zinc ores and concentrates	,,	300,773	426,178	403,822	22,322	45,631	58,872
Titanium and zirconium concentrates	,,	1,324,422	1,488,390	1,397,930	63,178	73,703	127,814
Coal	,,	25,795,068	27,853,061	32,656,981	291,894	348,397	660,707
Petroleum and petroleum products	,,	..	..	..	45,537	103,821	161,456
Tallow, inedible	,,	179,942	134,038	134,007	24,357	33,774	32,105
Leather (excluding leather manufacturers)	,,	..	..	..	4,502	2,167	2,129
Lead and lead alloys, unworked	,,	297,373	288,338	282,217	82,993	120,675	132,038
Copper and copper alloys	,,	70,216	86,005	127,994	81,251	138,396	142,303
Zinc and zinc alloys	,,	203,898	164,778	140,429	61,968	69,809	78,526
Machinery and transport equipment	,,	..	..	..	367.398	367,469	447,862
Drugs and chemicals	,,	..	..	..	265,028	339,966	467,172
Paper, pulp and stationery	,,	..	..	..	17,117	19,396	23,316
Motor vehicles (new, assembled)	No.	17,655	9,491	4,206	31,948	22,423	11,809
All other articles		..	..	..	1,069,623	1,215,261	1,771,391
Total Australian Produce		..	..	..	5,961,425	6,707,055	8,404,387

IMPORTS OF ASSEMBLED NEW PASSENGER MOTOR CARS(a) BY COUNTRY

Year	France No.	France $'000	Germany, F. R. No.	Germany, F. R. $'000	Italy No.	Italy $'000	Japan No.	Japan $'000	Sweden No.	Sweden $'000	United Kingdom No.	United Kingdom $'000	Total all countries(b) No.	Total all countries(b) $'000
1960–61(c)	381	517	917	1,417	797	736	336	290	n.a.	n.a.	2,103	4,806	4,944	8,534
1961–62	108	148	320	535	733	816	667	556	62	107	1,022	2,480	3,664	6,011
1962–63	114	186	2,482	3,208	2,203	2,680	3,596	3,248	56	96	2,051	5,503	11,999	17,696
1963–64	56	93	1,112	1,602	2,535	3,332	7,709	7,035	127	250	1,890	4,884	15,115	20,487
1964–65	53	85	939	2,281	2,226	2,672	22,559	19,043	36	70	2,033	5,333	28,930	31,672
1965–66	54	92	1,353	4,227	1,716	2,195	16,386	14,977	196	361	1,835	5,036	22,204	28,367
1966–67	48	96	1,793	6,026	1,867	2,548	17,836	15,979	231	437	1,346	4,025	23,578	30,182
1967–68	96	209	3,267	7,695	4,032	4,961	35,591	29,262	364	674	1,286	3,505	45,096	47,529
1968–69	87	192	2,656	7,989	6,797	9,004	28,478	25,784	917	1,889	1,627	4,461	40,931	50,487
1969–70	194	401	3,233	11,299	8,479	10,399	24,497	22,889	683	1,518	2,029	6,075	39,438	53,615
1970–71	258	564	2,833	11,796	4,125	6,201	36,891	34,806	2 035	4,657	2,244	8,187	48,617	66,997
1971–72	321	596	2,302	10,650	2,284	2,888	33,906	36,222	842	1,957	1,742	7,527	41,992	63,464
1972–73	784	1,619	2,771	13,474	1,743	4,207	38,262	45,168	150	370	1,095	4,996	45,259	71,620
1973–74	738	1,373	4,179	23,385	3,271	7,308	79,116	97,515	1,614	3,984	1,782	8,382	91,478	145,041
1974–75	1,732	3,872	5,735	36,439	7,923	20,061	124,782	171,827	4,024	10,997	2,450	14,102	147,855	261,853

(a) Excludes buses and special vehicles. (b) Includes countries not shown separately. (c) From 1.10.1960

Imports of merchandise, by economic class

The following table shows imports of merchandise into Australia classified according to economic classes of (i) purpose and (ii) degree of manufacture.

IMPORTS OF MERCHANDISE, BY ECONOMIC CLASS: AUSTRALIA

	Value ($'000 f.o.b.)			*Proportion of value of imports of merchandise (per cent)*		
	1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
PURPOSE						
Producers' materials for use in—						
Building and construction	167,084	253,509	239,039	4.1	4.2	3.0
Rural industries	47,880	70,668	114,981	1.2	1.2	1.4
Manufacturing—						
Motor vehicle assembly(*a*)	228,760	289,096	413,498	5.6	4.8	5.2
Other(*b*)	1,269,279	2,027,585	2,511,907	31.2	33.6	31.6
Total producers' materials(b)	*1,713,002*	*2,640,857*	*3,279,425*	*42.1*	*43.8*	*41.2*
Capital equipment(*c*)—						
Producers' equipment	855,892	1,096,963	1,678,030	21.0	18.2	21.1
Transport equipment—						
Complete road vehicles and assembled chassis	193,853	329,951	526,472	4.8	5.5	6.6
Railway equipment, vessels and civil aircraft	69,382	113,336	144,400	1.7	1.9	1.8
Total capital equipment	*1,119,127*	*1,540,250*	*2,348,902*	*27.5*	*25.6*	*29.5*
Finished consumer goods—						
Food, beverages and tobacco	171,073	232,684	280,547	4.2	3.9	3.5
Clothing and accessories	88,180	172,002	232,989	2.2	2.9	2.9
All other(*d*)	736,561	1,045,623	1,384,173	18.1	17.3	17.4
Total, finished consumer goods(d)	*995,814*	*1,450,309*	*1,897,709*	*24.5*	*24.1*	*23.8*
Fuels and lubricants(*e*)	68,933	123,712	234,314	1.7	2.1	2.9
Auxiliary aids to production(*f*)	93,505	119,938	156,248	2.3	2.0	2.0
Munitions and war stores	81,530	152,024	47,309	2.0	2.5	0.6
Grand total	**4,071,911**	**6,027,091**	**7,963,908**	**100.0**	**100.0**	**100.0**
DEGREE OF MANUFACTURE(*g*)						
Producers' materials—						
Crude	322,939	599,665	825,492	7.9	10.0	10.4
Simply transformed	311,201	493,170	545,213	7.6	8.2	6.8
Elaborately transformed	1,078,861	1,548,022	1,908,719	26.5	25.7	24.0
Finished consumer goods—						
Crude	42,302	54,078	61,794	1.0	0.9	0.8
Simply transformed	57,333	77,443	108,262	1.4	1.3	1.4
Elaborately transformed	896,179	1,318,782	1,727,653	22.0	21.9	21.7
Total imports—						
Crude	365,241	653,744	887,287	9.0	10.8	11.1
Simply transformed	498,351	775,308	989,788	12.2	12.9	12.4
Elaborately transformed	3,208,319	4,598,039	6,086,832	78.8	76.3	76.4
Grand total	**4,071,911**	**6,027,091**	**7,963,908**	**100.0**	**100.0**	**100.0**

(*a*) Owing to insufficient information, it is not possible to treat unassembled tractors and other machinery in a similar manner to motor vehicles, and all such machinery and replacement parts therefor are treated as capital equipment whether imported in an assembled or unassembled condition. (*b*) Excludes a percentage for piece-goods to be sold at retail, and paper to be used solely for wrapping, which are recorded in Finished consumer goods, All other; and Auxiliary aids to production, respectively. (*c*) *See* footnote (*a*). (*d*) Includes a percentage for piece-goods to be sold at retail; *see* footnote (*b*). (*e*) Excludes crude petroleum, which is included in Producers' materials, Manufacturing—Other. (*f*) Includes a percentage for paper to be used solely for wrapping; *see* footnote (*b*). (*g*) The class fuels and lubricants consists of goods 'simply transformed', and the classes Capital equipment and Munitions and war stores entirely of goods 'more elaborately transformed'. The class Auxiliary aids to production is about equally divided between goods 'simply transformed' and 'elaborately transformed'.

Direction of Overseas Trade

Exports and imports, by country of consignment or of origin

The following two tables show the value and percentage of Australian exports and imports according to principal country of consignment or origin. The proportions of Australian exports and imports by country of origin or consignment are shown graphically on plate 36 on page 332.

AUSTRALIAN EXPORTS AND IMPORTS, VALUE BY COUNTRY OF CONSIGNMENT OR ORIGIN

($'000 f.o.b.)

	Exports			*Imports*		
Country	*1954–55*	*1964–65*	*1974–75*	*1954–55*	*1964–65*	*1974–75*
Arab Republic of Egypt	3,758	5,849	134,573	622	241	345
Argentina	22	675	41,865	1,522	298	7,150
Austria	1,852	3,504	3,357	8,242	8,202	34,526
Bahrain	878	1,336	24,702	30,638	1,313	97,289
Bangladesh	(*a*)	(*a*)	42,364	(*a*)	(*a*)	7,636
Belgium-Luxembourg	62,504	59,514	73,543	24,468	24,880	73,026
Brazil	46	192	32,533	4,264	5,041	28,059
Canada	21,006	39,914	288,906	47,680	117,006	217,100
China (excl. Taiwan Province)	5,410	135,633	253,967	3,464	22,862	81,150
Taiwan Province	1,092	8,137	80,950	200	4,355	113,103
Denmark	2,084	3,974	4,723	2,318	6,725	34,523
Fiji	7,834	18,958	60,542	2,614	13,796	10,080
Finland	322	657	2,426	6,918	16,766	39,821
France	128,112	111,781	175,069	29,378	66,903	139,838
Germany, Federal Republic of	63,646	83,837	308,503	61,676	161,014	580,039
Greece	1,154	13,869	31,959	260	1,499	20,770
Hong Kong	34,630	54,757	105,179	4,738	24,414	172,240
India	38,876	55,400	83,160	52,114	40,909	57,840
Indonesia	7,404	7,431	175,251	45,058	64,034	18,693
Iran	584	18,449	116,411	11,868	26,698	76,796
Iraq	520	4,745	44,899	828	12,503	92,519
Israel	222	2,294	4,317	440	1,441	14,168
Italy	71,830	85,190	150,042	23,480	50,511	208,818
Japan	117,146	440,740	2,396,265	36,844	258,574	1,420,862
Korea, Republic of	(*a*)	3,972	122,435	(*a*)	774	48,369
Kuwait	(*a*)	5,242	30,819	(*a*)	31,819	118,618
Malaysia	(*a*)	(*a*)	194,370	(*a*)	(*a*)	58,800
Nauru, Republic of	1,006	3,302	11,195	2,404	6,399	34,920
Netherlands	13,714	20,702	145,898	26,162	36,762	123,399
New Caledonia	4,622	9,118	19,109	58	1,555	1,150
New Zealand	75,588	158,302	529,270	16,084	46,541	183,910
Norway	1,146	5,801	14,223	13,020	8,882	45,578
Pakistan, Islamic Republic of	(*a*)	(*a*)	86,490	(*a*)	(*a*)	5,386
Papua New Guinea	24,444	58,517	193,806	11,430	19,720	34,179
Peru	76	2,650	24,510	1,068	2,672	3,568
Philippines	3,418	20,920	99,721	230	3,242	24,147
Poland	12,486	14,380	51,426	246	2,476	9,074
Saudi Arabia	1,914	5,431	27,863	13,726	49,974	171,136
Singapore, Republic of	23,200	(*a*)	206,480	4,984	(*a*)	126,905
South Africa, Republic of	5,738	24,765	97,861	8,698	16,797	43,930
Spain	1,714	9,597	35,604	2,558	7,534	41,238
Sri Lanka	17,446	18,671	45,148	39,032	17,277	12,834
Sweden	6,482	8,584	34,581	27,032	53,568	183,229
Switzerland	4,406	4,136	9,391	21,164	35,458	104,790
Thailand	2,314	13,855	49,444	152	1,139	16,150
Union of Arab Emirates	(*a*)	997	21,804	(*a*)	1,931	9,177
United Kingdom	571,012	516,226	474,838	757,338	761,412	1,214,426
United States of America	104,880	264,193	831,496	204,314	692,246	1,668,181
U.S.S.R.	2,370	76,441	243,086	260	2,167	6,376
Yugoslavia	686	11,958	32,501	82	495	3,698
Other countries	98,734	229,393	349,421	135,718	167,803	237,440
'For Orders' and Country of origin or destination unknown	(*a*)	7,460	54,466	2,090	6,075	6,100
Total	**1,548,328**	**2,651,449**	**8,672,762**	**1,687,484**	**2,904,703**	**8,083,099**

(*a*) Comparable figures not available.

AUSTRALIAN EXPORTS AND IMPORTS, PROPORTIONS, BY COUNTRY OF CONSIGNMENT OR ORIGIN

(Per cent)

Country	*Exports*			*Imports*		
	1954–55	*1964–65*	*1974–75*	*1954–55*	*1964–65*	*1974–75*
Arab Republic of Egypt	0.24	0.22	1.55	0.04	0.01	0.00
Argentina	0.00	0.03	0.48	0.09	0.01	0.09
Austria	0.12	0.13	0.04	0.49	0.28	0.43
Bahrain	0.06	0.05	0.28	1.82	0.05	1.20
Bangladesh	(*a*)	(*a*)	0.49	(*a*)	(*a*)	0.09
Belgium-Luxembourg	4.04	2.24	0.85	1.45	0.86	0.90
Brazil	0.00	0.01	0.38	0.25	0.17	0.35
Canada	1.36	1.51	3.33	2.83	4.03	2.69
China (excluding Taiwan Province)	0.35	5.12	2.93	0.21	0.79	1.00
Taiwan Province	0.07	0.31	0.93	0.01	0.15	1.40
Denmark	0.13	0.15	0.05	0.14	0.23	0.43
Fiji	0.51	0.72	0.70	0.15	0.47	0.12
Finland	0.02	0.02	0.03	0.41	0.58	0.49
France	8.27	4.22	2.02	1.74	2.30	1.73
Germany, Federal Republic of	4.11	3.16	3.56	3.65	5.54	7.18
Greece	0.07	0.52	0.37	0.02	0.05	0.26
Hong Kong	2.24	2.07	1.21	0.28	0.84	2.13
India	2.51	2.09	0.96	3.09	1.41	0.72
Indonesia	0.48	0.28	2.02	2.67	2.20	0.23
Iran	0.04	0.70	1.34	0.70	0.92	0.95
Iraq	0.03	0.18	0.52	0.05	0.43	1.14
Israel	0.01	0.09	0.05	0.03	0.05	0.18
Italy	4.64	3.21	1.73	1.39	1.74	2.58
Japan	7.57	16.62	27.63	2.18	8.90	17.58
Korea, Republic of	(*a*)	0.15	1.41	(*a*)	0.03	0.60
Kuwait	(*a*)	0.20	0.36	(*a*)	1.10	1.47
Malaysia	(*a*)	(*a*)	2.24	(*a*)	(*a*)	0.73
Nauru, Republic of	0.06	0.12	0.13	0.14	0.22	0.43
Netherlands	0.89	0.78	1.68	1.55	1.27	1.53
New Caledonia	0.30	0.34	0.22	0.00	0.05	0.01
New Zealand	4.88	5.97	6.10	0.95	1.60	2.28
Norway	0.07	0.22	0.16	0.77	0.31	0.56
Pakistan, Islamic Republic of	(*a*)	(*a*)	1.00	(*a*)	(*a*)	0.07
Papua New Guinea	1.58	2.21	2.23	0.68	0.68	0.42
Peru	0.00	0.10	0.28	0.06	0.09	0.04
Philippines	0.22	0.79	1.15	0.01	0.11	0.30
Poland	0.81	0.54	0.59	0.01	0.09	0.11
Saudi Arabia	0.12	0.20	0.32	0.81	1.72	2.12
Singapore, Republic of	1.50	(*a*)	2.38	0.30	(*a*)	1.57
South Africa, Republic of	0.37	0.93	1.13	0.52	0.58	0.54
Spain	0.11	0.36	0.41	0.15	0.26	0.51
Sri Lanka	1.13	0.70	0.52	2.31	0.59	0.16
Sweden	0.42	0.32	0.40	1.60	1.84	2.27
Switzerland	0.28	0.16	0.11	1.25	1.22	1.30
Thailand	0.15	0.52	0.57	0.01	0.04	0.20
Union of Arab Emirates	(*a*)	0.04	0.25	(*a*)	0.07	0.11
United Kingdom	36.88	19.47	5.48	44.88	26.21	15.02
United States of America	6.77	9.96	9.59	12.11	23.83	20.64
U.S.S.R.	0.15	2.88	2.80	0.02	0.07	0.08
Yugoslavia	0.04	0.45	0.37	0.00	0.02	0.05
Other countries	6.38	8.64	4.03	8.05	5.78	2.95
'For Orders' and Country of origin or destination unknown	(*a*)	0.28	0.63	0.12	0.21	0.08
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

(*a*) Comparable figures not available.

Exports and Imports, by country of consignment and origin, and by description

The following table shows details of exports to and imports from principal countries, classified according to divisions of the Australian Export and Import Commodity Classifications.

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75

($'000 f.o.b.)

Division No.	Description	*Arab Republic of Egypt*		*Belgium-Luxembourg*		*Canada*	
		Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00	Live animals	..	..	..	..	346	..
01	Meat and meat preparations	4,418	..	508	..	33,099	602
02	Dairy products and eggs	1	..	..	39	6,436	..
03	Fish and fish preparations	..	..	203	28	226	3,497
04	Cereal grains and cereal preparations	115,881	..	5,258	59	6	239
05	Fruit and vegetables	30	133	746	525	12,055	5,185
06	Sugar and sugar preparations and honey	..	..	9	8	165,306	153
07	Coffee, tea, cocoa, spices and manufactures thereof	..	2	..	28	53	..
08	Feeding-stuff for animals (except unmilled cereals)	..	..	..	40	..	..
09	Miscellaneous preparations chiefly for food	..	..	1	28	11	214
11	Beverages	2	..	5	19	1,893	127
12	Tobacco and tobacco manufactures	..	..	6	..	1	161
21	Hides, skins and fur skins, undressed	262	..	393	7	6	21
22	Oil-seeds, oil nuts and oil kernels	..	..	935	..	..	1,112
23	Crude rubber (including synthetic and reclaimed)	..	..	7	1,031	2	594
24	Wood, timber and cork	..	..	372	49	8	24,672
25	Pulp and waste paper	..	..	..	..	..	12,005
26	Textile fibres and their waste	10,855	..	19,113	279	2,214	493
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	..	..	12	103	..	20,723
28	Metalliferous ores and metal scrap	16	..	26,981	40	11,334	2,116
29	Crude animal and vegetable materials, n.e.s.	..	11	285	59	1,145	1,423
32	Coal, coke and briquettes	1,975	..	5,022	..	..	1
33	Petroleum and petroleum products	..	..	..	311	1	89
34	Petroleum gases and other gaseous hydrocarbons	(*a*)	..	(*a*)	..	(*a*)	..
41	Animal oils and fats	..	..	252	..	53	..
42	Fixed vegetable oils and fats	..	..	..	8	..	335
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	..	..	5	..	74	..
51	Chemical elements and compounds	998	..	2,346	7,955	39,990	4,970
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	131	4	..	..
53	Dyeing, tanning and colouring materials	..	..	..	418	34	412
54	Medicinal and pharmaceutical products	1	..	4	383	57	511
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	..	1	49	96	35	308
56	Fertilisers, manufactured	..	..	..	91	..	3,711
57	Explosives and pyrotechnic products	..	..	31	146	4	620
58	Plastic materials, regenerated cellulose and artificial resins	..	..	110	1,190	19	7,800
59	Chemical materials and products, n.e.s.	..	..	110	1,405	890	1,457
61	Leather, leather manufactures, n.e.s., and dressed fur skins	..	..	1	106	112	123
62	Rubber manufactures, n.e.s.	..	..	2	2,351	206	627
63	Wood and cork manufactures (except furniture)	..	..	4	292	2	1,399
64	Paper, paperboard and manufactures thereof	2	..	..	2,523	36	40,583
65	Textile yarn, fabrics, made-up articles and related products	..	175	29	4,996	135	7,612
66	Non-metallic mineral manufactures, n.e.s.	..	1	1,336	9,541	1,155	3,019
67	Iron and steel	..	..	6,756	2,051	2,311	1,124
68	Non-ferrous metals	..	..	403	839	772	6,162
69	Manufactures of metals, n.e.s.	..	..	528	2,372	1,945	8,868
71	Machinery (except electric)	69	..	442	18,087	2,951	26,576
72	Electric machinery, apparatus and appliances	13	..	146	8,573	634	7,678
73	Transport equipment	20	..	18	302	242	5,140
81	Sanitary, plumbing, heating and lighting fixtures and fittings	10	..	3	40	1	412
82	Furniture	..	5	..	127	12	694
83	Travel goods, handbags and similar articles	..	..	..	2	2	100
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	..	..	27	32	358	989
85	Footwear, gaiters, and similar articles and parts therefor	..	..	..	5	16	99
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	..	10	97	2,223	978	2,149
89	Miscellaneous manufactured articles, n.e.s.	5	7	729	2,731	848	6,697
9A	Commodities and transactions of merchandise trade, not elsewhere classified(*b*)	1	2	30	1,423	383	2,777
	Total merchandise	*134,557*	*345*	*73,445*	*72,963*	*288,397*	*216,378*
9B	Commodities and transactions not included in merchandise trade	16	..	98	63	509	722
	Grand total	**134,573**	**345**	**73,543**	**73,026**	**288,906**	**217,100**

(*a*) Included in Division 9A. (*b*) Includes Division 34 and 68 (Exports only).

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75—*continued*

($'000 f.o.b.)

Div. No.	*China (excluding Taiwan Province)*		*Taiwan Province*		*France*		*Germany, Federal Republic of*		*Hong Kong*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00	1	..	..	..	..	6	..	5	436	..
01	11	49	7,115	..	2,822	62	1,360	53	4,192	..
02	..	..	12,854	3	..	642	..	348	7,223	..
03	20	637	93	755	1,151	106	455	751	2,146	232
04	158,058	163	25,004	7	21	23	7,531	268	7,799	193
05	..	2,286	38	4,770	1,039	295	5,743	561	2,121	388
06	13,928	12	4	33	..	52	398	48	134	61
07	..	1,369	..	68	3	35	..	327	369	109
08	4	..	1,080	89	..	104	3,461	528	245	..
09	43	187	10	276	..	174	..	244	503	400
11	4	10	6	..	..	3,833	13	1,819	871	5
12	..	258	..	..	..	72	..	216	234	..
21	2,566	167	614	4	41,279	151	9,206	..	1,549	..
22	..	50	..	..	11	..	2,269	3	5	62
23	..	..	..	12	..	346	..	288	14	..
24	..	..	..	103	93	63	162	23	179	28
25	..	..	..	9	..	3	..	..	11	..
26	2,801	356	9,937	94	68,838	36	58,446	1,180	5,301	212
27	..	863	1,467	1	3	171	17	1,544	118	3
28	11,014	54	1,165	..	23,922	..	87,792	34	359	143
29	6	1,726	180	91	267	278	2,986	292	320	384
32	..	..	3,727	..	13,840	..	8,309	316	8	..
33	..	459	6	21	58	37	20	864	21	..
34	(*a*)	..	(*a*)	..	(*a*)	43	(*a*)	..	(*a*)	..
41	6,726	..	1,691	..	1,031	..	258	..	88	..
42	..	283	..	..	..	3	..	172	9	134
43	20	1	52	..	13	42	463	116	335	..
51	306	2,254	862	495	159	9,237	7,917	25,440	797	151
52	..	..	..	..	..	2	624	6	1	..
53	336	101	139	..	..	1,511	71	6,137	238	6
54	..	468	22	184	108	1,353	425	22,602	1,452	79
55	..	112	30	42	48	3,354	108	1,765	849	923
56	..	..	..	..	..	737	..	1,125	1	..
57	..	92	4	124	70	21	398	228	38	19
58	392	4	55	3,354	155	8,492	13	16,423	1,159	438
59	2	2,369	52	18	66	1,071	127	7,331	252	469
61	..	112	22	332	84	635	299	934	268	38
62	..	72	11	1,713	12	5,842	68	9,995	40	28
63	..	84	9	9,701	3	236	105	902	22	174
64	..	857	16	115	19	1,712	26	8,685	1,117	688
65	..	31,551	89	13,667	37	5,021	139	15,911	1,556	38,320
66	2	1,888	245	1,891	92	3,726	1,926	11,193	9,537	1,706
67	55,398	13	4,043	907	100	2,646	26,739	10,069	12,140	22
68	172	408	5,421	1,054	15,741	288	65,670	3,120	6,146	128
69	5	914	439	2,938	244	3,157	1,774	18,490	2,342	2,888
71	43	369	2,343	2,963	567	22,074	1,759	154,969	4,041	4,489
72	170	997	687	9,482	1,017	10,866	1,131	78,365	2,270	12,274
73	83	40	475	2,197	861	30,481	153	99,830	2,703	1,278
81	..	157	..	303	..	118	..	1,575	129	1,474
82	..	402	57	3,151	39	191	7	441	126	1,088
83	..	443	..	2,878	1	128	1	256	46	5,800
84	6	18,541	11	28,039	150	2,744	355	1,854	909	60,226
85	..	5,210	2	9,363	1	1,728	8	536	4	2,302
86	1	707	133	810	311	4,287	851	33,363	3,223	4,308
89	..	2,816	113	8,655	174	7,041	5,587	25,890	1,372	28,139
9A(*b*)	3	1,214	515	2,327	63	3,713	676	9,145	705	2,030
	252,122	*81,127*	*80,839*	*113,040*	*174,514*	*138,987*	*305,850*	*576,581*	*88,067*	*171,839*
9B	1,845	23	111	63	555	851	2,653	3,458	17,112	401
	253,967	81,150	80,950	113,103	175,069	139,838	308.503	580,039	105,179	172,240

(*a*) Included in Division 9A. (*b*) Includes Division 34 (Exports only).

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75—*continued*

($'000 f.o.b.)

Division No.	Description	*India*		*Indonesia*		*Italy*	
		Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00	Live animals	41	..	607	..	..	..
01	Meat and meat preparations	32	23	392	..	635	180
02	Dairy products and eggs	182	10	7,571	..	..	1,424
03	Fish and fish preparations	..	2,472	9	113	214	81
04	Cereal grains and cereal preparations	31,590	36	85,263	1	1,783	253
05	Fruit and vegetables	48	3,973	655	81	201	4,800
06	Sugar and sugar preparations and honey	12	2	156	..	..	1,543
07	Coffee, tea, cocoa, spices and manufactures thereof	..	6,769	64	11,183	..	167
08	Feeding-stuff for animals (except unmilled cereals)	1	..	25	..	..	42
09	Miscellaneous preparations chiefly for food	8	90	239	8	1	210
11	Beverages	29	..	222	..	1	3,064
12	Tobacco and tobacco manufactures	..	..	27	34	..	4
21	Hides, skins and fur skins, undressed	42	..	..	..	9,746	..
22	Oil-seeds, oil nuts and oil kernels	..	123	..	58	1,931	..
23	Crude rubber (including synthetic and reclaimed)	..	..	..	1,927	..	32
24	Wood, timber and cork	..	67	34	1,618	30	1
25	Pulp and waste paper	..	..	270	..	..	..
26	Textile fibres and their waste	16,428	2,140	163	..	47,996	75
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	5	180	1,040	1	12	493
28	Metalliferous ores and metal scrap	1,834	..	272	..	38,765	2
29	Crude animal and vegetable materials, n.e.s.	9	582	39	55	551	146
32	Coal, coke and briquettes	..	..	170	..	33,015	..
33	Petroleum and petroleum products	..	31	340	514	61	28
34	Petroleum gases and other gaseous hydrocarbons	(*a*)	...	(*a*)	..	(*a*)	..
41	Animal oils and fats	28	..	27	..	321	..
42	Fixed vegetable oils and fats	..	577	10	982	..	640
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	..	388	466	..	..	..
51	Chemical elements and compounds	197	1,059	3,141	41	29	3,645
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	..	..	..	..	..	..
53	Dyeing, tanning and colouring materials	4	70	611	..	2	630
54	Medicinal and pharmaceutical products	21	101	493	412	192	801
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	51	108	745	136	78	337
56	Fertilisers, manufactured	..	..	1,996	..	..	50
57	Explosives and pyrotechnic products	1	..	3	..	45	73
58	Plastic materials, regenerated cellulose and artificial resins	138	6	1,404	..	3	2,917
59	Chemical materials and products, n.e.s.	26	176	764	18	14	241
61	Leather, leather manufactures, n.e.s., and dressed fur skins	18	665	7	40	292	955
62	Rubber manufactures, n.e.s.	2	201	210	..	..	3,377
63	Wood and cork manufactures (except furniture)	..	172	100	81	4	910
64	Paper, paperboard and manufactures thereof	46	47	494	..	1	3,295
65	Textile yarn, fabrics, made-up articles and related products	42	19.355	304	77	37	10,367
66	Non-metallic mineral manufactures, n.e.s.	71	1,742	1,175	10	107	8,188
67	Iron and steel	1,886	582	8,478	..	234	3,658
68	Non-ferrous metals	26,147	1	10,292	..	10,918	2,233
69	Manufactures of metal, n.e.s.	21	1,030	5,810	7	214	5,178
71	Machinery (except electric)	971	3,566	10,923	16	714	48,896
72	Electric machinery, apparatus and appliances	114	1,934	2,776	3	1,010	26,385
73	Transport equipment	280	205	16,066	26	47	32,381
81	Sanitary, plumbing, heating and lighting fixtures and fittings	..	73	220	11	1	1,807
82	Furniture	..	143	129	40	..	3,212
83	Travel goods, handbags and similar articles	..	249	2	9	6	1,099
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	2	4,989	134	269	46	4,962
85	Footwear, gaiters, and similar articles and parts therefor	9	1,983	46	331	..	10,596
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	57	242	665	13	226	4,722
89	Miscellaneous manufactured articles, n.e.s.	54	1,077	755	226	95	11,684
9A	Commodities and transactions of merchandise trade, not elsewhere classified(*b*)	125	539	3,716	335	146	2,377
	Total merchandise	*80,572*	*57,776*	*169,522*	*18,678*	*149,726*	*208,162*
9B	Commodities and transactions not included in merchandise trade	2,589	64	5,729	15	316	656
	Grand total	**83,160**	**57,840**	**175,251**	**18,693**	**150,042**	**208,818**

(*a*) Included in Division 9A. (*b*) Includes Division 34 (Exports only).

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75—*continued*

($'000 f.o.b.)

Div. No.	*Japan*		*Malaysia*		*Netherlands*		*New Zealand*		*Pakistan Islamic Rep. of*	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00	137	..	646	..	..	11	2,287	7,962	27	..
01	45,194	24	2,253	..	1,852	117	392	429	21	..
02	37,340	8	9,985	..	..	1,198	440	1,759	181	..
03	21,834	17,812	71	2,698	68	815	866	4,471	..	108
04	314,854	387	44,608	10	5	791	23,673	1,907	71,684	173
05	5,040	771	1,273	184	2,450	1,008	4,802	6,799	13	..
06	108,997	217	50,623	..	19	531	14,997	1,651	12	..
07	6,287	1,551	1,262	1,369	..	10,548	614	125	..	6
08	4,795	1,917	921	1	5	26	108	277	..	..
09	366	393	299	35	..	286	532	566	2	..
11	362	69	228	..	1	326	997	63	2	..
12	2	11	1	..	..	8,038	333	22	..	..
21	9,293	..	103	..	1,834	10	431	379	140	..
22	359	4	18	1	1,853	2	577	16	..	..
23	78	2,482	6	13,779	3	377	735	..	..	..
24	1,554	93	..	18,888	501	1	1,280	4,947	..	..
25	7	7,678	171	..	..	..	..	21,100	..	..
26	233,905	6,446	100	38	19,135	2,583	1,347	8,821	1,573	720
27	17,930	3,788	1,096	..	587	26	2,230	249	..	14
28	758,069	203	17,152	119	46,045	..	851	1,700	339	..
29	3,719	781	244	178	510	1,011	1,092	2,503	..	79
32	508,641	282	54	..	23,358	..	168	..	..	..
33	25,152	3,131	1,346	1	..	290	80,822	17	..	..
34	(*a*)	..	(*a*)	..	(*a*)	5	(*a*)	..	(*a*)	..
41	6,639	..	2,250	..	6,042	..	49	11	36	..
42	..	846	181	6,423	..	210	1,265	1	..	..
43	37	288	91	..	39	1,986	241	26	4	..
51	32,856	77,003	3,152	119	18,040	8,016	28,901	658	242	..
52	1	184	..	..	..	1	945	2	..	..
53	153	1,500	243	1	196	1,211	4,577	436	..	..
54	1,765	2,833	1,746	287	968	2,102	14,965	2,241	134	..
55	1,501	687	2,096	20	49	613	2,402	1,082	2	1
56	2	1,016	21	..	..	181	145	119	..	..
57	3	42	..	..	16	..	1,087	3	..	..
58	393	35,035	404	277	19	3,767	10,580	1,709	12	..
59	3,131	3,267	898	29	17	4,830	4,054	374	32	20
61	135	800	346	20	9	61	666	890	21	94
62	33	32,943	88	1,545	18	1,527	1,419	847	..	14
63	46,518	1,077	86	3,198	22	138	1,742	623	..	4
64	221	20,663	2,833	4	192	4,400	4,389	27,951	43	..
65	1,320	94,631	659	3,081	26	3,940	18,338	15,743	..	2,462
66	3,506	30,160	718	38	170	1,125	7,515	1,606	74	29
67	21,888	151,674	5,104	10	258	508	53,298	203	9,866	..
68	70,811	4,930	8,525	140	16,207	266	36,569	701	220	..
69	4,632	33,638	3,543	563	214	1,556	18,859	6,703	250	82
71	2,848	159,529	9,235	2,563	837	13,489	35,656	10,453	390	..
72	2,060	202,287	3,541	203	3,411	29,852	33,397	17,272	819	27
73	2,274	382,267	5,382	18	93	1,489	59,104	10,427	62	..
81	30	2,141	232	14	3	301	461	304	..	11
82	81	991	154	415	6	527	386	1,571	..	11
83	38	1,301	5	20	2	10	61	1,216	..	3
84	520	4,060	498	735	80	103	717	3,810	11	526
85	1	1,286	3	548	..	30	284	898	..	58
86	968	39,975	791	206	143	7,254	12,805	1,362	115	270
89	2,112	61,685	843	341	87	4,317	16,183	5,161	6	558
9A(*b*)	83,261	20,881	923	490	143	1,386	3,485	2,737	4	37
	2,393,652	*1,417,670*	*187,053*	*58,608*	*145,535*	*123,196*	*514,118*	*182,900*	*86,338*	*5,307*
9B	2,613	3,192	7,317	192	363	203	15,152	1,011	152	79
	2,396,265	**1,420,862**	**194,370**	**58,800**	**145,898**	**123,399**	**529,270**	**183,910**	**86,490**	**5,386**

(*a*) Included in Division 9A. (*b*) Includes Division 34 and 68 (Exports only).

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75—*continued*

($'000 f.o.b.)

Division No.	Description	*Papua New Guinea*		*Philippines*		*Singapore, Rep. of*	
		Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00	Live animals	102	..	27	..	1,915	..
01	Meat and meat preparations	14,366	..	2,901	..	6,401	7
02	Dairy products and eggs	3,360	..	12,355	..	7,682	..
03	Fish and fish preparations	528	472	5	55	933	1,204
04	Cereal grains and cereal preparations	20,259	..	14,934	2	25,494	27
05	Fruit and vegetables	2,259	128	6	3,288	8,170	111
06	Sugar and sugar preparations and honey	7,354	..	6	..	13,656	2
07	Coffee, tea, cocoa, spices and manufactures thereof	1,293	15,780	..	..	455	861
08	Feeding-stuff for animals (except unmilled cereals)	1,767	..	1,539	..	2,475	18
09	Miscellaneous preparations chiefly for food	1,329	..	55	..	354	108
11	Beverages	1,947	19	27	9	923	2
12	Tobacco and tobacco manufactures	1,988	323	..	451	..	..
21	Hides, skins and fur skins, undressed	3	..	..	..	10	1
22	Oil-seeds, oil nuts and oil kernels	3	1,185	..	..	3	7
23	Crude rubber (including synthetic and reclaimed)	96	2,767	114	..	6	836
24	Wood, timber and cork	41	3,181	..	4,109	2	1,978
25	Pulp and waste paper	17	..	..	..	82	..
26	Textile fibres and their waste	603	..	9	68	263	..
27	Crude fertilisers and crude minerals (except coal, petroleum and precious stones)	305	..	418	1	375	..
28	Metalliferous ores and metal scrap	9	199	435	426	2,489	16
29	Crude animal and vegetable materials, n.e.s.	209	20	102	131	289	308
32	Coal, coke and briquettes	8	..	47	..	..	..
33	Petroleum and petroleum products	4,508	97	128	..	10,637	94,869
34	Petroleum gases and other gaseous hydrocarbons	(*a*)	..	(*a*)	..	(*a*)	..
41	Animal oils and fats	829	..	640	..	1,623	..
42	Fixed vegetable oils and fats	375	3,342	..	1,504	62	189
43	Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	274	..	54	..	71	8
51	Chemical elements and compounds	1,296	..	2,017	174	1,116	9
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	6	..	94	..	1	..
53	Dyeing, tanning and colouring materials	944	..	433	4	1,212	48
54	Medicinal and pharmaceutical products	1,009	..	727	39	1,212	333
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	3,703	..	186	..	2,482	19
56	Fertilisers, manufactured	74	..	433	..	7	..
57	Explosives and pyrotechnic products	370	..	4	181	4	..
58	Plastic materials, regenerated cellulose and artificial resins	1,923	..	1,127	698	1,598	1,688
59	Chemical materials and products, n.e.s.	909	260	332	30	1,024	10
61	Leather, leather manufactures, n.e.s., and dressed fur skins	31	..	122	117	606	135
62	Rubber manufactures, n.e.s.	1,446	..	107	59	206	110
63	Wood and cork manufactures (except furniture)	279	2,986	12	1,359	62	2,225
64	Paper, paperboard and manufactures thereof	6,546	..	443	74	2,105	91
65	Textile yarn, fabrics, made-up articles and related products	1,700	7	457	573	1,184	2,730
66	Non-metallic mineral manufactures, n.e.s.	3,151	26	523	843	4,577	238
67	Iron and steel	13,917	21	19,154	59	11,310	3
68	Non-ferrous metals	1,145	..	7,039	..	5,052	..
69	Manufactures of metal, n.e.s.	9,514	66	5,030	215	9,447	583
71	Machinery (except electric)	22,990	32	9,879	192	22,647	3,646
72	Electric machinery, apparatus and appliances	10,657	6	1,593	143	6,798	2,591
73	Transport equipment	9,176	46	9,840	963	32,015	385
81	Sanitary, plumbing, heating and lighting fixtures and fittings	784	..	22	203	460	9
82	Furniture	627	1	6	817	132	1,065
83	Travel goods, handbags and similar articles	70	..	..	52	30	172
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	1,214	19	95	4,119	1,797	3,591
85	Footwear, gaiters, and similar articles and parts therefor	813	1	11	709	117	310
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	2,018	44	2,646	63	4,479	455
89	Miscellaneous manufactured articles, n.e.s.	4,186	70	600	1,996	3,127	4,122
9A	Commodities and transactions of merchandise trade, not elsewhere classified(*b*)	19,846	365	705	322	916	1,381
	Total merchandise	*184,177*	*31,469*	*97,440*	*24,048*	*200,095*	*126,505*
9B	Commodities and transactions not included in merchandise trade	9,629	2,710	2,281	99	6,385	400
	Grand total	193,806	34,179	99,721	24,147	206,480	126,905

(*a*) Included in Division 9A. (*b*) Includes Division 34 and 68 (Exports only).

EXPORTS AND IMPORTS BY COUNTRY OF CONSIGNMENT AND ORIGIN: DIVISIONS OF THE AUSTRALIAN EXPORT AND IMPORT COMMODITY CLASSIFICATIONS, 1974-75—*continued*

($'000 f.o.b.)

Div. No.	South Africa, Republic of		Sweden		United Kingdom		United States of America		U.S.S.R.	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
00 .	142	..	..	..	71	5,436	635	2,050	..	..
01 .	2,155	..	9,692	1	33,942	919	220,886	182	2,692	..
02 .	241	..	..	175	4	126	1,413	567	..	..
03 .	1,055	5,147	256	105	795	6,421	37,114	2,052	1	825
04 .	1,809	28	11	284	6,989	1,862	104	613	99,730	..
05 .	859	682	4,039	19	30,047	3,225	3,113	14,039	..	1
06 .	2	9	20	9	36,542	2,355	165,782	309	42,082	4
07 .	415	47	..	3	141	1,535	767	424	..	3
08 .	29	2,782	..	3	116	15	89	2,347	..	..
09 .	52	13	..	5	43	2,043	20	1,608	..	..
11 .	4	39	2	3	1,644	13,725	1,329	2,673	6	31
12 .	..	..	..	143	..	2,789	107	18,654	..	..
21 .	1,198	..	1,105	17	3,481	196	826	450	..	185
22 .	..	13	..	..	534	86	122	3,140	..	..
23 .	1	..	..	..	1	902	1	5,506	..	..
24 .	192	..	7	72	2,675	119	283	19,989	..	..
25 .	..	..	1	11,471	..	..	..	13,763	..	..
26 .	323	118	2,242	1,041	24,698	2,058	9,707	10,899	98,485	..
27 .	217	4,729	..	115	208	1,021	486	6,194	..	..
28 .	1,931	906	1,761	1	41,843	80	69,249	938	..	..
29 .	463	317	431	10	1,847	3,608	2,603	3,715	..	148
32 .	..	270	..	..	28,884	565	3,701	325	..	..
33 .	591	2,331	69	12	6,726	3,027	5,727	16,005	..	85
34 .	(*a*)	..	(*a*)	..	(*a*)	..	(*a*)	50	(*a*)	..
41 .	7,176	200	..	..	1,196	80	775	216	..	..
42 .	..	1,377	..	403	480	14	..	11,963	..	..
43 .	29	32	..	..	276	658	322	1,772	..	..
51 .	13,558	1,187	10	889	4,201	39,477	139,128	91,773	..	850
52 .	..	..	..	..	..	194	1	2,922	..	..
53 .	180	866	1	57	163	11,042	69	7,628	..	..
54 .	671	80	..	2,513	1,582	30,815	635	17,366	..	96
55 .	156	69	85	24	242	7,240	174	10,640	..	7
56 .	..	..	..	27	..	29	..	5,965	..	18
57 .	..	164	16	47	547	2,952	..	1,821	..	..
58 .	1,268	2	3	906	241	49,025	264	46,024	..	..
59 .	343	311	221	681	3,571	31,618	9,323	38,621	..	135
61 .	146	20	32	27	821	5,695	54	1,085	..	7
62 .	162	404	3	2,014	320	28,534	214	23,018	..	..
63 .	124	713	7	1,163	383	1,470	87	1,268	..	4
64 .	379	229	6	14,062	72	16,629	642	45,257	..	..
65 .	703	1,161	6	1,842	470	61,892	404	48,852	..	357
66 .	811	3,711	18	1,627	1,278	26,916	3,293	19,419	..	95
67 .	4,550	8,067	45	14,997	2,401	19,307	24,305	20,385	..	575
68 .	322	649	7,970	910	143,687	12,512	34,113	13,394	..	1,357
69 .	4,093	1,339	419	8,645	3,990	45,781	8,024	43,551	..	8
71 .	15,422	1,835	1,604	46,591	12,550	269,649	16,539	507,593	2	698
72 .	5,572	541	2,849	18,789	5,267	134,633	4,870	117,630	15	90
73 .	25,210	661	950	45,372	8,269	144,749	12,276	188,136	..	91
81 .	55	11	..	433	88	3,425	10	1,876	..	2
82 .	28	39	..	509	38	4,652	17	2,078	..	..
83 .	11	4	1	110	11	1,064	10	485	..	..
84 .	261	391	119	179	1,162	19,604	1,359	3,250	..	..
85 .	..	285	..	35	12	3,982	4	331	..	..
86 .	1,665	325	169	2,015	3,786	44,767	4,713	72,493	4	237
89 .	1,850	438	141	1,310	5,970	105,231	4,827	108,752	5	161
9A(*b*) .	609	549	117	2,547	1,938	30,880	7,382	27,625	..	119
	97,034	*43,091*	*34,427*	*182,216*	*426.242*	*1,206,630*	*797,962*	*1,609,679*	*243,022*	*6,189*
9B .	827	838	154	1,013	48,596	7,796	33,534	58,502	64	187
	97,861	43,930	34,581	183,229	474,838	1,214,426	831,496	1,668,181	243,086	6,376

(*a*) Included in Division 9A. (*b*) Includes Division 34 (Exports only).

Trade with eastern countries

Details of exports to and imports from eastern countries are shown in the following table. Further information for principal eastern countries, by divisions of the Australian Export and Import Commodity Classifications, is shown in the tables on pages 340–5.

TRADE OF AUSTRALIA WITH EASTERN COUNTRIES, BY COUNTRY OF CONSIGNMENT OR ORIGIN

($'000 f.o.b.)

	Exports			*Imports*		
Country	*1972–73*	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Bangladesh	11,802	33,720	42,364	6,222	9,710	7,636
Bhutan	..	20	46	8	..	..
Brunei	594	469	1,089	971	..	..
Burma, Socialist Republic of	2,146	2,262	9,191	219	230	220
China (excl. Taiwan Province)	62,847	162,550	253,967	49,922	71,857	81,150
Taiwan Province	69,788	76,491	80,950	54,342	114,048	113,103
Hong Kong	94,881	114,074	105,179	80,148	159,603	172,240
India	37,396	99,300	83,160	31,678	52,876	57,840
Indonesia	74,623	106,467	175,251	13,597	16,550	18,693
Japan	1,932,316	2,158,141	2,396,265	738,950	1,084,968	1,420,862
Khmer, Republic of	984	648	347	127	153	103
Korea, Democratic People's Republic of	286	13,330	7,522	69	56	269
Korea, Republic of	52,895	54,772	122,435	10,434	31,346	48,369
Laos	155	180	506	..	1	1
Macao	50	54	56	56	786	4,497
Malaysia	97,216	117,637	194,370	38,445	69,565	58,800
Nepal	495	159	610	83	70	86
Pakistan, Islamic Republic of	7,122	7,969	86,490	4,576	12,282	5,386
Philippines	49,306	79,228	99,721	7,786	16,234	24,147
Singapore	131,808	147,677	206,480	40,069	82,082	126,905
Sri Lanka	10,950	15,390	45,148	9,620	9,448	12,834
Thailand	35,864	50,627	49,444	7,110	9,922	16,150
Timor	1,186	1,140	2,274	..	4	..
Viet Nam, Democratic Republic of	9	533	1,865	..	..	7
Viet Nam, Republic of	8,838	8,087	9,634	34	562	575
Total	**2,683,557**	**3,250,925**	**3,974,364**	**1,094,466**	**1,742,353**	**2,169,873**

Ships' and aircraft stores

Ships' and aircraft stores loaded on overseas ships and aircraft are excluded from exports. The value of these stores is shown in the table below.

STORES LOADED ON BOARD OVERSEAS VESSELS AND AIRCRAFT: AUSTRALIA

($A'000 f.o.b.)

Stores	*1972–73*	*1973–74*	*1974–75*
Cigarettes, cigars and tobacco	752	700	764
Fuel, lubricating oil and lubricants	41,701	69,938	135,903
Foodstuffs for human consumption—			
Meats	1,882	2,123	2,463
Sugar	36	39	46
Milk and cream, preserved	36	31	38
Butter	70	32	40
Cheese	40	34	39
Eggs in shell	137	110	156
Seafoods	295	282	306
Prepared grains	68	135	234
Vegetables	384	460	679
Fruit	201	191	224
Tea	9	6	4
Other	795	910	1,544
Fodder	141	157	199
Alcoholic beverages	2,138	2,072	2,616
Other ships' stores	6,572	7,072	14,374
Total	**55,257**	**84,292**	**159,629**

Overseas trade at customs ports

The following table shows the value of exports and imports at customs ports of Australia, and the totals for each State and Territory.

OVERSEAS TRADE: CUSTOMS PORTS, AUSTRALIA, 1974-75
($'000 f.o.b.)

Port or customs station	*Exports*	*Imports*
New South Wales—		
Sydney	1,139,152	2,717,327
Botany Bay (Kurnell)	5,075	106,993
Byron Bay	..	..
Coff's Harbour (including Ballina)	..	..
Grafton (including Yamba)	..	..
Kingsford-Smith Airport	191,591	478,552
Newcastle (including Port Stephens)	417,114	82,553
Port Kembla	214,839	87,485
Richmond	13	1,251
Twofold Bay (including Eden)	11,221	(*b*)
Parcels Post, Sydney	(*a*)	20,620
Total New South Wales	*1,979,005*	*3,494,781*
Victoria—		
Melbourne	1,246,044	2,367,430
Geelong	222,885	134,993
Melbourne Airport	84,984	254,290
Portland	20,509	9,969
Westernport	122,406	6,409
Parcels Post, Melbourne	(*a*)	20,320
Total Victoria	*1,696,828*	*2,793,411*
Queensland—		
Brisbane	571,437	472,215
Bowen	4,312	1
Brisbane Airport	13,845	16,987
Bundaberg	75,653	16
Cairns (including Cairns Airport)	127,440	4,508
Cape Flattery	561	..
Gladstone	289,622	41,829
Hay Point	196,244	..
Innisfail	71,126	..
Mackay	204,696	8,230
Maryborough (including Urangan)	..	126
Rockhampton (including airport and Port Alma)	11,168	924
Thursday Island	1,015	316
Townsville (including airport)	440,656	28,760
Weipa	(*a*)	3,660
Parcels Post, Brisbane	(*a*)	2,480
Total Queensland	*2,007,775*	*580,051*
South Australia—		
Port Adelaide (including Stenhouse Bay)	338,930	352,864
Adelaide Airport	18,944	26,173
Adelaide City	..	..
Ardrossan	15,751	..
Cape Thevenard	35,967	..
Edithburgh	..	..
Port Augusta	1,940	..
Port Giles	5,506	..
Port Lincoln	91,230	3,398
Port Pirie (including Port Germein)	115,587	3,059
Port Stanvac	1,276	84,489
South Australia—*continued*		
Port Wallaroo	46,920	1,080
Whyalla	92,304	7,309
Woomera	55	50
Parcels Post, Adelaide	(*a*)	3,655
Total South Australia	*764,410*	*482,077*
Western Australia—		
Fremantle	956,570	370,418
Albany	78,622	8,314
Barrow Island	..	..
Broome	15,055	1,779
Bunbury	48,523	8,464
Busselton	..	..
Cape Cuvier	5,831	1,886
Carnarvon	..	..
Derby	9,608	1,233
Esperance	36,562	2,740
Exmouth (North West Cape)	183	820
Geraldton	98,947	3,881
Dampier (King Bay)	277,160	24,050
Kwinana	18,509	95,065
Perth	9,312	..
Perth Airport	9,444	13,676
Onslow	..	..
Port Walcott (including Point Samson)	..	15,297
Port Hedland	281,164	26,340
Useless Loop	616	..
Wyndham	10,141	1,263
Yampi Sound (Cockatoo Island)	23,835	..
Parcels Post, Perth	(*a*)	2,193
Total Western Australia	*1,880,082*	*577,419*
Tasmania—		
Hobart (including Cambridge Airport and Hobart Alighting Area)	83,532	50,357
Burnie (including Wynyard Airport)	54,535	23,374
Devonport (including Devonport Airport and Ulverstone)	12,167	5,326
Launceston (including Launceston Airport and Beauty Point)	50,049	21,559
Port Latta	21,638	..
Port Stanley	..	..
Spring Bay	4,233	..
Parcels Post	(*a*)	(*b*)
Total Tasmania	*226,154*	*100,616*
Northern Territory—		
Darwin (including Darwin Airport, Groote Eylandt and Gove)	117,064	48,895
Australian Capital Territory—		
Canberra	1,445	5,848
Grand Total	8,672,762	8,083,099

(*a*) Included with main port. (*b*) Included with respective port.

Movement of bullion and specie

The following table shows the values of gold and silver bullion and specie, and of bronze specie, exported from and imported into Australia.

EXPORTS AND IMPORTS OF BULLION AND SPECIE: AUSTRALIA

($'000 f.o.b.)

	Exports			*Imports*		
	1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Gold—Bullion(*a*)	24,477	33,402	43,122	5,443	7,468	10,180
Specie	113	785	1,087	155	861	3,125
Total gold	*24,590*	*34,187*	*44,209*	*5,598*	*8,329*	*13,305*
Silver—Bullion(*a*)	9,156	9,034	14,921	101	199	113
Specie	74	135	83	153	102	1,037
Total silver	*9,230*	*9,169*	*15,004*	*254*	*301*	*1,150*
Other (including bronze and cupro-nickel)—Specie	625	702	987	65	76	30
Total—						
Australian Produce	34,109	44,044	52,071	..	..	..
Re-exports	336	14	8,129	..	..	..
Grand total	**34,445**	**44,058**	**60,200**	**5,917**	**8,706**	**14,485**

(*a*) Includes matte.

The following table shows the exports and imports of bullion and specie to and from various countries.

EXPORTS AND IMPORTS OF BULLION AND SPECIE, BY COUNTRY OF CONSIGNMENT OR ORIGIN, 1974–75

($'000 f.o.b.)

	Exports			*Imports*		
Country	*Bullion*	*Specie*	*Total*	*Bullion*	*Specie*	*Total*
Fiji	65	104	169	7,598	..	7,598
Germany, Federal Republic of	1,311	4	1,315	5	7	12
Hong Kong	13,622	..	13,622	170	..	170
Japan	8,405	..	8,405	..	..	..
Malaysia	190	..	190	10	..	10
New Zealand	1,714	1,009	2,723	29	2	31
Papua New Guinea	16	521	537	2,460	123	2,583
Singapore	488	..	488	..	3	3
Solomon Islands	..	133	133	..	..	..
Switzerland	410	..	410	..	403	403
United Kingdom	30,556	3	30,559	5	1,105	1,110
United States of America	..	258	258	11	545	556
Other Countries	1,266	125	1,391	..	1,973	1,973
Australia re-imported	..	..	..	5	31	36
Total	**58,043**	**2,157**	**60,200**	**10,293**	**4,192**	**14,485**

Total import clearances, dutiable clearances, and customs duties collected

The following table shows the value of total import clearances, total dutiable clearances, and the customs duties collected, together with the ratio of total dutiable clearances to total clearances.

TOTAL IMPORT CLEARANCES, DUTIABLE CLEARANCES, AND CUSTOMS DUTIES

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Total import clearances . . .	$'000	4,103,786	3,976,345	4,132,983	6,015,035	7,976,280
Total dutiable clearances . . .	,,	2,005,478	1,929,319	1,804,803	2,329,826	3,030,229
Total customs duties collected .	,,	503,686	506,905	537,544	621,864	857,386
Ratio of dutiable clearances to total clearances	per cent	48.9	48.5	43.7	38.7	38.0
Ratio of duties collected to dutiable clearances	,,	25.1	26.3	29.8	26.7	28.3

Overseas trade in calendar years

For the purpose of comparison with countries which record overseas trade in calendar years, the following table has been compiled to show estimates of Australian exports and imports on a calendar year basis.

OVERSEAS TRADE IN CALENDAR YEARS, AUSTRALIA
($'000 f.o.b.)

	Merchandise		*Non-merchandise*		*Total*	
Year	*Exports*	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
1971	4,471,998	4,085,975	126,825	53,149	4,598,823	4,139,124
1972	5,303,919	3,826,249	128,185	50,809	5,432,104	3,877,058
1973	6,590,153	4,786,732	147,121	53,017	6,737,272	4,839,749
1974	7,509,538	7,705,050	175,076	64,037	7,684,614	7,769,087
1975	8,829,562	7,506,561	233,402	127,532	9,062,964	7,634,093

Excise

Although excise goods have no immediate bearing on overseas trade, the rate of excise duty is in some cases related to the import duty on similiar goods. Moreover, as the Excise Acts are administered by the Bureau of Customs, it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of customs and excise revenue are shown in the chapter Public Authorities Finance. The following table shows the quantities of spirits, beer, tobacco, etc., on which excise duty was paid in Australia.

QUANTITIES OF PRINCIPAL EXCISABLE GOODS ON WHICH EXCISE DUTY WAS PAID: AUSTRALIA

Article	*1973–74*	*1974–75*
	'000 litre	'000 litre
Beer	1,824,278	1,884,978
	'000 l al	'000 l al
Spirits—		
Brandy	3,382	2,925
Gin	777	718
Whisky	1,057	926
Rum	1,511	1,354
Liqueurs	398	345
Vodka	643	659
Flavoured spirituous liquors	224	208
Other	11	8
Total spirits (potable)	*8,003*	*7,141*
	'000 kg	'000 kg
Tobacco	2,426	2,270
Cigars	129	121
Cigarettes—machine-made	27,871	28,498
	'000 litre	'000 litre
Petrol—		
Aviation gasoline (by-law)(a)	53,644	53,428
Aviation gasoline—Other(a)	73	36,884
Gasoline	12,113,465	12,503,983
Total petrol	*12,167,182*	*12,594,293*
Mineral turpentine	23	11
Aviation turbine kerosene(a)	847,241	924,665
Other kerosene	516	4,066
Diesel fuel (as defined by by-law)	1,197,038	1,229,914
	doz. packs '000	doz. packs '000
Playing cards	160	149
	60 papers or tubes '000	60 papers or tubes '000
Cigarette papers and tubes	58,555	3,344,827
	matches '000	matches '000
Matches	36,235	31,433
	'000 tonnes	'000 tonnes
Coal	51,121	60,137
	'000 doz containers	'000 doz containers
Canned fruit	8,890	7,734

(a) Includes supplies to Commonwealth Government on which excise was paid. During the years 1973–74 and 1974–75 refunds were made on 238,544,108 litres and 262,918,250 litres respectively.

PRIVATE OVERSEAS INVESTMENT

Surveys of overseas investment have been conducted since 1947–48 to obtain particulars of certain types of private capital flows to and from Australia. The surveys, when supplemented by other information, provide statistics of overseas investment in companies in Australia and in Australian public authority securities repayable in Australian currency, as well as statistics of Australian investment in companies overseas and in foreign government securities. Particulars of investment income from most of those classes of investment are also obtained from the surveys.

Certain types of private overseas investment are not included in the statistics which follow. Investment in real estate (except when made through companies) and loans between Australian individuals and non-resident individuals are not covered. Nor are changes in short-term liabilities between exporters and importers in Australia and overseas covered, except in so far as they arise from exports and imports between branches or subsidiaries and their home offices or parent companies. In this case they are included in the figures of investment in branches or subsidiaries.

In the tables which classify investment in Australia according to country of origin, the investment is shown as an inflow from the country which is the immediate source of the capital. Income payable overseas is classified on a similar basis, i.e. it is classified to the country to which it is directly payable.

Remittances between Australia and overseas by Australian life insurance companies are regarded as capital transactions made to bring assets located in overseas countries into line with commitments in those countries, and are included as a flow of investment between Australia and overseas. Similar considerations apply to overseas life insurance companies with branches in Australia.

The following are explanatory notes relating to some of the terms used in the tables.

Branches. Offices in Australia of companies incorporated overseas *or* offices in separate overseas countries of companies incorporated in Australia, the value of whose net liabilities to head office exceeds $A10,000 or whose annual net profit or loss exceeds $A10,000. Australian branches of companies overseas *include* other Australian offices of companies overseas where a branch register is maintained in Australia but *exclude* companies in Australia which are incorporated overseas but which have no business operations in Australia other than an account with a bank in Australia. Overseas branches of companies in Australia *exclude* companies overseas which are incorporated in Australia but which have no business operations overseas other than an account with a bank overseas. However, the short-term assets represented by the bank accounts overseas are included as Australian portfolio investment overseas for those companies included in the surveys of overseas investment.

Companies. Incorporated and unincorporated businesses and other organisations. *Excludes* companies which have no business operations in a country other than an account with a bank in that country.

Direct investment. All investment in branches and subsidiaries by direct investors and other related companies except branch liabilities, for interest, goods and services, to related companies overseas other than head offices of the Australian branches.

Overseas. Countries other than Australia. *Includes* Norfolk Island and other external territories of Australia. Overseas branches and subsidiaries of companies in Australia are also regarded as being resident overseas.

Portfolio investment and institutional loans. Investment in companies other than direct investment, i.e. investment other than investment by related companies in branches and subsidiaries.

Subsidiaries. An *Australian subsidiary* of a company overseas is a company in Australia, other than a branch, in which:

(*a*) a single overseas resident (individual or company) or a group of related companies in the one overseas country holds 25 per cent or more of the equity, or, if this condition does not apply,
(*b*) residents of one overseas country combined hold 50 per cent or more of the equity,

together with other companies in Australia in which the Australian subsidiary holds, directly or indirectly, more than 50 per cent of the equity.

An *overseas subsidiary* of a company in Australia is a company overseas other than a branch, in which a company in Australia holds 25 per cent or more of the equity. In principle, companies overseas in which the combined Australian shareholding is 50 per cent or more would also be included but it is not practicable to ascertain the total investment by Australian shareholders in individual companies overseas.

Undistributed profits of subsidiaries. Equity of direct investors in the net earnings of a company during the year, less tax payable on those earnings and less dividends declared during the year whether relating to earnings of the same year or not. Net earnings are in general based on income for taxation purposes. However, certain deductions allowable for taxation purposes (e.g. mining exploration expenditure, Export Market Development Allowance, Investment Allowance for Manufacturing Plant, previous year's losses, etc.) are not deducted in calculating net earnings. Undistributed profits of Australian subsidiaries also includes undistributed income accruing to the subsidiary from related companies in Australia.

Unremitted profits of branches. Net earnings (after tax) during the year, less remittances of earnings to the head office during the year, irrespective of the year to which the earnings relate. Net earnings of branches are in general similar to those for subsidiaries. Also included is undistributed income accruing to the branch of other companies related to the branch.

The annual bulletin *Insurance and Other Private Finance* (5.15) and the Annual Bulletin of *Overseas Investment* (5.20) contain additional figures relating to overseas investment, including a longer range of years covered, and also a more detailed description of the figures.

Private overseas investment in companies in Australia and investment income payable overseas by companies in Australia

The inflow of private overseas investment in Australia in recent years is shown in the next three tables.

INFLOW OF OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA BY CATEGORY OF INVESTMENT

($ million)

Year	*Direct investment*						
	Australian branches		*Australian subsidiaries*				
	Un-remitted profits (net)	*Other direct investment*	*Un-distributed profits (net)*	*Other direct investment*	*Total direct*	*Portfolio investment and institutional loans*	*Total*
1969–70	−10	156	225	356	728	274	1,001
1970–71	12	151	233	507	903	655	1,559
1971–72	21	129	201	523	873	600	1,473
1972–73	50	41	263	− 1	353	104	457
1973–74	19	16	412	132	578	−106	472
1974–75p	7	16	202	346	571	273	844

Minus sign (—) denotes outflow.

INFLOW OF OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA, BY COUNTRY AND BROAD CATEGORY OF INVESTMENT

($ million)

Year	*United Kingdom*	*U.S.A.*	*Canada*	*Japan*	*E.E.C. (a)*	*Other countries*	*Total*
UNDISTRIBUTED INCOME							
1969–70	144	62	11	− 2	− 8	7	215
1970–71	138	90	15	− 3	− 1	6	245
1971–72	99	113	20	− 1	− 5	− 5	221
1972–73	156	146	12	6	2	− 9	313
1973–74	190	218	18	4	−11	11	431
1974–75p	74	175	2	5	−32	−14	210
OTHER DIRECT INVESTMENT							
1969–70	94	296	23	21	41	37	512
1970–71	156	238	23	65	50	128	658
1971–72	155	250	12	60	38	136	652
1972–73	58	−28	8	−20	−10	32	40
1973–74	76	37	12	31	26	−35	147
1974–75p	74	45	− 1	45	49	149	362
PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS							
1969–70	111	− 3	− 5		171		274
1970–71	255	141	18		242		655
1971–72	158	194	8		239		600
1972–73	−108	−37	− 5	64	71	118	104
1973–74	−150	−76	−12	24	84	24	−106
1974–75p	− 45	133	12	14	98	61	273
TOTAL							
1969–70	350	355	29		268		1,001
1970–71	549	469	55		487		1,559
1971–72	413	558	40		463		1,473
1972–73	106	81	16	51	63	140	457
1973–74	117	179	18	59	99	..	472
1974–75p	103	353	13	63	116	197	844

(*a*) Includes France, Federal Republic of Germany, Italy, Netherlands, Belgium, Luxembourg, Denmark, and Ireland from 1972–73 onwards.

Minus sign (—) denotes outflow.

INFLOW OF DIRECT OVERSEAS INVESTMENT IN COMPANIES IN AUSTRALIA, BY INDUSTRY

($ million)

Year	*Primary production*	*Manu-facturing*	*Other industries*	*Total*
1969–70	200	232	296	728
1970–71	280	246	377	903
1971–72	359	185	329	873
1972–73	63	78	212	353
1973–74	57	245	276	578
1974–75p	53	272	246	571

The next three tables show investment income payable overseas by companies in Australia.

INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA BY CATEGORY OF INCOME

($ million)

Year	*Direct investment income payable overseas by companies in Australia*					
	Australian branches		*Australian subsidiaries*			
				Distributed earnings		
	Unremitted profits (net)	*Remitted profits and interest*	*Undistributed profits (net)*	*Dividends payable*	*Interest payable*	*Total direct*
1969–70	−10	67	225	141	52	474
1970–71	12	83	233	131	63	523
1971–72	21	81	201	134	87	523
1972–73	50	108	263	203	88	712
1973–74	19	128	412	203	87	849
1974–75p	7	174	202	203	106	692

Year	*Income payable overseas on portfolio investment and institutional loans*			*Grand total*
	Dividends	*Interest*	*Total*	
1969–70	55	36	91	566
1970–71	57	45	102	625
1971–72	63	69	132	655
1972–73	69	80	149	861
1973–74	71	88	159	1,008
1974–75p	71	129	200	892

INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA BY COUNTRY AND BROAD CATEGORY OF INCOME

($ million)

Year	*United Kingdom*	*U.S.A.*	*Canada*	*Japan*	*E.E.C. (a)*	*Other countries*	*Total*
UNDISTRIBUTED INCOME							
1969–70	144	62	11	−2	−8	7	215
1970–71	138	90	15	−3	−1	6	245
1971–72	99	113	20	−1	−5	−5	221
1972–73	156	146	12	6	2	−9	313
1973–74	190	218	18	4	−11	11	431
1974–75p	74	175	2	5	−32	−14	210
DISTRIBUTED INCOME ON DIRECT INVESTMENT							
1969–70	96	134	7	5	6	11	259
1970–71	104	138	7	5	7	17	278
1971–72	91	165	6	9	7	23	302
1972–73	123	221	13	10	8	25	399
1973–74	139	235	6	11	5	21	419
1974–75p	127	299	12	13	9	24	483
INCOME PAYABLE ON PORTFOLIO INVESTMENT AND INSTITUTIONAL LOANS							
1969–70	42	25	1		23		91
1970–71	44	26	1		32		102
1971–72	51	34	2		44		132
1972–73	60	33	3	2	16	35	149
1973–74	56	29	2	5	24	42	159
1974–75p	67	35	3	8	29	58	200
TOTAL							
1969–70	282	221	18		43		566
1970–71	285	254	23		63		625
1971–72	242	312	28		73		655
1972–73	339	400	27	18	26	50	861
1973–74	385	483	27	21	18	75	1,008
1974–75p	268	508	17	25	6	68	892

(*a*) Includes France, Federal Republic of Germany, Italy, Netherlands, Belgium, Luxembourg, Denmark, and Ireland from 1972–73 onwards. (*b*) Not available for publication.

Minus sign (−) denotes outflow.

DIRECT INVESTMENT INCOME PAYABLE OVERSEAS BY COMPANIES IN AUSTRALIA, BY INDUSTRY

($ million)

Year	*Primary production*	*Manu-facturing*	*Other industries*	*Total*
1969–70	53	255	167	474
1970–71	134	240	149	523
1971–72	114	236	173	523
1972–73	182	284	246	712
1973–74	273	325	252	849
1974–75p	294	259	139	692

Australian investment in companies overseas and investment income receivable from companies overseas

The outflow of Australian investment in companies in recent years and a classification by country in which the capital was invested are shown in the following two tables.

OUTFLOW OF AUSTRALIAN INVESTMENT IN COMPANIES OVERSEAS BY CATEGORY OF INVESTMENT

($ million)

	Direct investment						
	Overseas branches		*Overseas subsidiaries*				
Year	*Unre-mitted profits (net)*	*Other direct investment*	*Undis-tributed profits (net)*	*Other direct investment*	*Total*	*Portfolio investment and institu-tional loans(a)*	*Grand total*
1969–70	−6	4	20	108	125	6	131
1970–71	−8	12	25	39	68	12	80
1971–72	−10	24	36	70	120	. .	121
1972–73	−8	9	83	17	102	14	116
1973–74	−2	52	102	34	186	16	201
1974–75p	−11	20	33	62	104	19	122

(a) Excludes portfolio investment in Papua New Guinea other than some long-term trade credit and short-term assets. Minus sign (—) denotes inflow.

OUTFLOW OF AUSTRALIAN INVESTMENT IN COMPANIES OVERSEAS BY COUNTRY

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Papua New Guinea(a)*	*Other countries*	*Total*
1969–70	35	10	5	72	10	131
1970–71	−1	21	9	36	15	80
1971–72	−11	26	10	63	32	121
1972–73	−1	24	20	(b)	(c)72	116
1973–74	41	23	28	(b)	(c)109	201
1974–75p	25	47	7	−6	50	122

(a) Excludes portfolio investment other than some long-term trade credit and short-term assets. (b) Not available for publication. (c) Includes Papua New Guinea.

Minus sign (—) denotes inflow.

The next two tables show income from direct investment receivable by Australian companies from companies overseas, and the countries from which it is receivable.

DIRECT INVESTMENT INCOME RECEIVABLE FROM OVERSEAS BY COMPANIES IN AUSTRALIA, BY TYPE OF COMPANY AND CATEGORY OF INCOME(*a*)

($ million)

Year	*Overseas branches*		*Overseas subsidiaries*		
	Unremitted profits (net)	*Remitted profits and interest*	*Undistributed profits (net)*	*Dividends and interest receivable*	*Total*
1969–70	−6	5	20	26	44
1970–71	−8	6	25	27	49
1971–72	−10	5	36	34	65
1972–73	−8	16	83	36	127
1973–74	−2	19	102	66	185
1974–75p	−11	20	33	53	95

(*a*) Details are not available of income receivable in Australia on either portfolio investment and institutional loans or on Australian holdings of foreign government securities.

Minus sign (—) denotes inflow.

DIRECT INVESTMENT INCOME RECEIVABLE FROM OVERSEAS BY COMPANIES IN AUSTRALIA, BY COUNTRY(*a*)

($ million)

Year	*United Kingdom*	*New Zealand*	*U.S.A. and Canada*	*Papua New Guinea(a)*	*Other countries*	*Total*
1969–70	4	13	1	10	17	44
1970–71	6	16	(*b*)	7	(*c*)20	49
1971–72	5	13	3	22	22	65
1972–73	18	21	3	(*b*)	(*d*)85	127
1973–74	25	34	2	(*b*)	(*d*)123	185
1974–75p	17	28	2	36	12	95

(*a*) Details are not available of income receivable in Australia on either portfolio investment and institutional loans or on Australian holdings of foreign government securities. (*b*) Not available for publication—included in 'Other countries'. (*c*) Includes U.S.A. and Canada. (*d*) Includes Papua New Guinea.

BALANCE OF PAYMENTS

Estimates of a country's balance of payments are prepared for the purpose of providing a systematic record in money terms of the economic transactions which take place over a period between that country and all other countries. Such records are essential to the examination of influences which external factors have on the domestic economy. The Australian economy is subject to fairly large fluctuations in export income, and it is also affected in important respects by variations in the level of foreign investment and the demand for imports. Consequently, these estimates have always assumed particular importance in this country.

Official estimates of Australia's balance of payments covering the period 1928–29 to 1930–31 were included in the Appendix to Year Book No. 24, 1931. Except for the war years (1939 to 1945), estimates have since been published annually. Detailed estimates are provided yearly in the publication *Balance of Payments* (8.1), which also provides a description of the various items included. A summarised statement of the principal current account items and capital movements is prepared and issued on a quarterly basis in the bulletin *Balance of Payments.*

In the form of presentation adopted for the Australian balance of payments estimates a basic distinction is made between 'current account' and 'capital account' transactions. Current account transactions may be defined as those involving changes in the ownership of goods or the rendering of services between residents of Australia and the rest of the world and include such items as exports, imports, shipping freights, dividends, profits and interest, travel, and government expenditure. The current account also includes the value of transfers in the form of gifts in cash or kind made or received by residents of Australia, both private and government, to or from the rest of the world. Capital account transactions may be defined as those involving claims to money and titles of investment between residents of Australia and those of another country and include government loan-raising operations overseas, investment by overseas residents in Australian companies, the investment of Australian residents in companies overseas, and changes in the level of Australia's foreign reserves.

By definition, the balance of payments on current account and the balance of payments on capital account during a given period must exactly offset one another. Errors and omissions, however, occur in the estimation of the amounts involved in various items in both the current and capital accounts, and, in addition, there are differences in timing between the statistical recording of trade and invisible transactions and the corresponding foreign exchange transactions. It is therefore necessary to introduce into the estimates a 'balancing item' which allows the identity between the current and capital account balances to be preserved. The 'balancing item' is included in the capital account, but, as mentioned above, it includes discrepancies in the current account and does not, as is frequently supposed, include only errors, omissions and timing differences related to capital transactions.

Details of the estimates are assembled from a variety of sources of which the following are the more important: (i) statistics of exports and imports obtained from Australian trade statistics; (ii) details of the import valuation adjustment obtained from a sample of the import warrants submitted to the Bureau of Customs in respect of imports into Australia; (iii) information on particular invisible current account items and capital movements obtained by regular inquiry from private organisations and government departments; (iv) details of receipts and payments of foreign exchange provided by the banking system; (v) information on profits remitted, undistributed income and private investment in companies provided by statistics of overseas investment collected by this Bureau; (vi) information on freight on imports and other items concerned with overseas transportation obtained from a sample of the import warrants submitted to the Bureau of Customs in respect of imports into Australia and from a survey conducted by the Australian Bureau of Statistics of overseas shipping and airline operations; and (vii) information supplied by the Reserve Bank of Australia on gold and other reserve assets of official and banking institutions.

Current account

The balance of payments on current account is arranged to show a series of items for each of which there is a credit and/or a debit entry. In most cases the credit entries represent transactions in goods and services, property income, and transfers, which result in receipts of foreign exchange, while the debit entries represent similar transactions which result in payments of foreign exchange. Some entries which do not entail movements of foreign exchange are also included, the principal examples being those for undistributed income and transactions, mainly in goods, in which the payments due are subsequently capitalised. These amounts are treated as credits or debits in the relevant sections of the current account, and as corresponding outflows or inflows in non-monetary items in the capital account. Transfers in kind provide a further example of transactions which do not require a movement of foreign exchange. The values of transfers received or provided in kind are shown as credits or debits respectively.

The largest items shown in the current account are exports and imports, and the difference between them represents the balance of trade. *For balance of payment purposes, certain adjustments are made to the recorded trade statistics.* Briefly, these adjustments are made to exclude those transactions for which there is no change of ownership between residents and non-residents of Australia and to include certain transactions for which there has been a change of ownership but for which customs entries are not required. In addition, a valuation adjustment is made to the recorded import statistics in order to remove the overstatement which results from the basis of valuation for customs duty. A full description of the adjustments was provided in the Appendix to the publication *Balance of Payments* (8.1), 1968–69. A full evaluation of the overall position on current account, however, occurs only after the invisible items have been taken into account. In value terms the most important of these are the transportation items. Entries appear on both the debit and credit sides, the principal component on the debit side being freight payable overseas on imports into Australia. The principal component on the credit side is expenditure by overseas carriers, which represents mainly overseas ships' expenditure for stevedoring, port charges, etc., incurred in loading and discharging goods at Australian ports, and stores purchased in Australia. The items next in importance are those concerning income from property. Debit entries under this heading include dividends, profits, interest and royalties payable overseas, while the credit entries include similar details of amounts receivable by Australian residents. These items include undistributed income in respect of which, as mentioned above, no monetary movements occur. The remaining items are smaller than those mentioned above, and include travel, government transactions, transfers (including foreign aid made available by the Australian Government), and, on the credit side, the net value of Australian gold production.

Capital account

In the capital account, transactions are recorded on a net basis; that is, according to the net effect of all debit and credit entries relating to each item. Thus entries on the credit side represent a net increase in non-residents' assets in Australia or a net decrease in Australian assets overseas, while debit entries represent a net decrease in non-residents' assets in Australia or a net increase in Australian assets overseas.

Capital account transactions are grouped according to the sector of the Australian party to the the transactions. The government sector, therefore, includes all capital transactions of central, State, local and semi-government authorities with the exception of transactions of monetary institutions (which are included in the monetary sector), while the private sector covers transactions of all resident individuals and private institutions (again excepting monetary institutions). The monetary sector covers all banking institutions, including government-owned banks. Transactions of the monetary sector are further sub-divided into those of official and 'non-official' monetary institutions. Transactions of official institutions include changes in Australia's official reserve assets (consisting of gold, foreign exchange, the I.M.F. gold tranche and special drawing rights in the I.M.F.) and transactions between the Reserve Bank of Australia and foreign central monetary authorities and the I.M.F. Also included is an item, *19.3 Allocation of Special Drawing Rights*. This the counterpart to the change in official reserve assets due to the allocation to Australia of S.D.R.s by the I.M.F. Such an entry is necessary in this case because without it there would be no corresponding credit to the increase in assets (debit) and the allocation would be reflected in an offsetting movement in the balancing item. 'Non-official' monetary institutions includes all other transactions of Australian monetary institutions.

In the government sector the most important items include transactions by non-residents in government securities domiciled overseas and in Australia and transactions involving changes in Australia's assets with and liabilities to international development institutions such as the International Bank for Reconstruction and Development and the Asian Development Bank. Other government transactions are largely a reflection of the net effect on the balance of payments of leads and lags between payments made overseas for items of equipment for the defence services or government airlines and the delivery of the equipment. In periods where payments exceed the value of deliveries a net debit results; in periods where the value of deliveries exceeds payments a net credit is recorded.

In the private sector the most important items are overseas investment in Australian companies, Australian investment overseas, and the transactions of marketing authorities. The figures for marketing authorities represent changes in the estimated value of commodity stock levels held overseas by, and in amounts owed by overseas debtors to, the principal Australian marketing authorities.

In the monetary sector the most important item is that which shows the net changes in Australia's official reserve assets.

The balancing item includes errors and omissions and timing differences, referred to on page 357.

Tables—Balance of payments

The following tables show particulars of:

(i) the balance of payments; and

(ii) the balance of payments by regions.

BALANCE OF PAYMENTS: AUSTRALIA

($ million)

	1972–73		*1973–74*		*1974–75*	
	Credit	*Debit*	*Credit*	*Debit*	*Credit*	*Debit*
CURRENT ACCOUNT						
Goods—						
1 Exports f.o.b.(*a*)	6,010	..	6,688	..	8,434	..
2 Imports f.o.b.(*a*)	..	3,808	..	5,753	..	7,662
Balance of trade	*2,202*	..	*935*	..	*772*	..
Invisibles—						
3 Gold production	27	..	30	..	56	..
4 Transportation—						
4.1 Freight on imports(*b*)	..	426	..	637	..	805
4.2 Expenditure of overseas carriers	390	..	460	..	648	..
4.3 Other transportation	182	415	220	528	319	658
5 Travel	123	321	162	341	213	405
6 Government—						
6.1 Australian government—						
6.11 Defence expenditure	..	49	..	43	..	47
6.12 Other expenditure	..	73	..	73	..	103
6.13 Services to non-residents	27	..	24	..	23	..
6.2 Foreign governments' expenditure	64	..	65	..	77	..
7 Miscellaneous—						
7.1 Business expenses	90	156	82	205	93	190
7.2 Other	45	79	48	66	59	112
8 Property income—						
8.1 Direct investment—						
8.11 Undistributed	75	302	99	424	33	232
8.12 Distributed	51	404	87	415	83	488
8.2 Interest on government loans	..	82	..	76	..	75
8.3 Royalties and copyrights	4	75	5	66	9	75
8.4 Other	240	149	319	158	288	201
9 Government transfers—						
9.1 Papua New Guinea	..	158	..	197	..	191
9.2 Other foreign aid	..	94	..	93	..	160
10 Private transfers—						
10.1 Migrants' funds	167	95	156	119	166	99
10.2 Other	71	121	98	143	231	166
Balance on current account	**758**	..	..	**792**	..	**935**

For footnotes *see* next page.

BALANCE OF PAYMENTS: AUSTRALIA—*continued*

($ million)

	1972–73		*1973–74*		*1974–75*	
	Credit	*Debit*	*Credit*	*Debit*	*Credit*	*Debit*
CAPITAL ACCOUNT (NET)						
Government—						
11 Government securities—						
11.1 Domiciled overseas	..	66	..	130	1	..
11.2 Domiciled in Australia	33	..	46	..	21	..
12 International development institutions	..	9	..	11	..	27
13 Other government transactions	..	22	91	..	..	19
Private—						
14 Overseas investment in Australian companies—						
14.1 Direct investment—						
14.11 Undistributed income	302	..	424	..	232	..
14.12 Other	47	..	163	..	384	..
14.2 Portfolio investment and institutional loans	107	..	..	135	309	..
15 Australian investment overseas—						
15.1 Direct investment—						
15.11 Undistributed income	..	74	..	99	..	33
15.12 Other	..	26	..	123	..	81
15.2 Portfolio investment	..	26	..	15	..	33
16 Other private investment	17	..	14	..	14	..
17 Marketing authorities	34	..	..	95	..	59
Monetary—						
18 Non-official monetary institutions—						
18.1 Changes in liabilities—						
18.11 Borrowings overseas	4	..	7	..	60	..
18.12 Other liabilities	91	..	14	..	81	..
18.2 Changes in assets—						
18.21 Advances to non-residents	..	6	..	4	..	3
18.22 Foreign currency balances	..	133	138	..	..	91
19 Official monetary institutions—						
19.1 Changes in liabilities—						
19.11 Use of I.M.F. credit	..	..	..	..	..	..
19.12 Other liabilities	10	..	50	..	7	..
19.2 Changes in official reserve assets	..	1,079	384	..	460	..
19.3 Allocation of S.D.R.'s	..	..	..	..	..	..
19.4 Other transactions	..	2	..	..	..	3
Balancing item	40	..	74	..	..	285
Balance on capital account	..	**758**	**792**	..	**935**	..

(*a*) The amounts shown represent the recorded trade figures adjusted for balance of payments purposes. Adjustments affect timing, coverage and valuation. (*b*) Freight payable overseas only. Total freight and insurance on imports, whether payable overseas or in Australia, is estimated at $463 million in 1971–72, 489 million in 1972–73, and $745 million in 1973–74.

BALANCE OF PAYMENTS BY REGIONS: AUSTRALIA
($ million)

	1972–73	*1973–74*	*1974–75*
CURRENT ACCOUNT(*a*)			
Exports f.o.b.(*b*)—			
United States of America	714	723	781
Canada	163	173	288
United Kingdom	565	436	428
European Economic Community(*c*)	661	649	834
Japan	1,921	2,139	2,398
New Zealand	311	434	513
Papua New Guinea	121	128	183
Sino-Soviet Area	275	451	602
Other countries	1,280	1,562	2,407
Total exports	*6,010*	*6,688*	*8,434*
Imports f.o.b.(*b*)—			
United States of America	805	1,334	1,568
Canada	122	182	204
United Kingdom	682	756	1,144
European Economic Community(*c*)	533	786	1,097
Japan	688	1,036	1,396
New Zealand	122	160	175
Papua New Guinea	23	38	31
Sino-Soviet Area	74	139	124
Other countries	759	1,322	1,923
Total imports	*3,808*	*5,753*	*7,662*
Invisibles (net)—			
United States of America	– 456	– 553	– 596
Canada	– 29	– 27	– 22
United Kingdom	– 500	– 583	– 457
European Economic Community(*c*)	– 130	– 161	– 150
Japan	– 3	– 11	– 32
New Zealand	10	41	64
Papua New Guinea	– 76	– 63	– 88
Sino-Soviet Area	– 6	– 4	– 7
Other countries	– 262	– 380	– 421
International agencies	– 20	– 17	– 54
Gold production	27	30	56
Total invisibles (net)	*–1,444*	*–1,727*	*–1,708*
Balance on current account—			
United States of America	– 546	–1,164	–1,384
Canada	12	– 37	62
United Kingdom	– 618	– 903	–1,173
European Economic Community(*c*)	– 2	– 298	– 412
Japan	1 230	1 092	970
New Zealand	199	315	402
Papua New Guinea	22	21	63
Sino-Soviet Area	195	307	471
Other countries	259	– 139	62
International agencies	– 20	– 17	– 54
Gold production	27	30	56
Balance on current account	**758**	**– 792**	**– 935**

For footnotes *see* next page.

BALANCE OF PAYMENTS BY REGIONS: AUSTRALIA—*continued*

($ million)

	1972–73	*1973–74*	*1974–75*
CAPITAL ACCOUNT (NET)(*a*)			
Non-monetary sector—			
Government capital movements—			
United States of America	− 69	27	. .
Canada	− 1	. .	. .
United Kingdom	− 51	− 35	− 65
European Economic Community(*c*)	− 10	3	23
Japan	28	1	. .
New Zealand	1	. .	. .
Papua New Guinea	. .	− 2	. .
Sino-Soviet Area	. .	. .	. .
International development financing institutions	− 20	− 24	− 38
Other countries	58	26	56
Total government capital movements	− *64*	− *4*	− *24*
Overseas investment in Australian companies—			
United States of America	91	189	448
Canada	8	18	15
United Kingdom	106	92	123
European Economic Community(*c*)	55	90	85
Japan	53	64	65
New Zealand	− 9	− 9	8
Papua New Guinea	4	13	− 13
Sino-Soviet Area	. .	. .	. .
Other countries(*c*)	147	− 6	193
Total overseas investment in Australian companies	*455*	*451*	*926*
Other capital movements—			
United States of America	− 7	− 37	− 9
Canada	− 6	− 1	− 4
United Kingdom	1	− 21	− 33
European Economic Community(*c*)	− 23	− 27	2
Japan	. .	. .	− 2
New Zealand	− 20	− 24	− 47
Papua New Guinea	− 50	− 49	12
Sino-Soviet Area	− 9	− 58	− 36
Other countries(*c*)	38	− 101	− 75
Total other private capital movements	− *76*	− *319*	− *192*
Total non-monetary sector transactions—			
United States of America	15	179	439
Canada	1	17	11
United Kingdom	56	36	25
European Economic Community(*c*)	22	66	110
Japan	81	65	63
New Zealand	− 28	− 33	− 39
Papua New Guinea	− 46	− 38	− 1
Sino-Soviet Area	− 9	− 58	− 36
International development institutions	− 20	− 24	− 38
Other countries and international institutions(*c*)	243	− 81	174
Total non-monetary sector transactions	*315*	*128*	*710*
Monetary sector transactions—			
Net official monetary movements(*c*)	−1,071	435	464
Non-official monetary sector transactions(*c*)	− 44	154	47
Balancing item(*c*)	40	74	− 285
Balance on capital account(*d*)(*c*)	**− 759**	**792**	**935**

(*a*) For current account balances minus sign (−) denotes deficit; for capital account items minus sign (−) denotes an increase in overseas assets or a decrease in liabilities to overseas. (*b*) The amounts shown represent recorded trade figures adjusted for balance of payments purposes. Adjustments affect timing, coverage and valuation. (*c*) Excluding United Kingdom. (*d*) No regional split is available for these items.

International reserves

The following table shows Australia's official reserve assets as at 30 June for recent years.

OFFICIAL RESERVE ASSETS

(*Source:* Reserve Bank of Australia)

($ million)

	30 June		
	1974	*1975*	*1976*
Official reserve assets—			
Gold	210	238	239
Special Drawing Rights	150	89	37
I.M.F. gold tranche	149	156	155
Foreign exchange—			
United States dollars	1,852	2,252	1,457
Others	1,199	758	688
Total	**3,560**	**3,493**	**2,576**

FOREIGN OWNERSHIP AND CONTROL

Introduction

A program of studies of foreign participation in key industries, economic activities and resources in Australia is being undertaken. Studies have been completed for mining, manufacturing, tourist accommodation, accredited advertising agencies, finance companies, general insurance and life insurance. The program of foreign participation studies will be extended progressively to cover other areas of the Australian economy and will provide for updating of studies in selected areas to monitor trends in foreign participation over time.

Brief explanatory notes and a summary of the main results of these studies are given below. More detailed statistics and explanatory notes are contained in the following bulletins on individual foreign participation studies.

Foreign Ownership and Control in Manufacturing Industry, 1972–73 (12.38), *Foreign Control in Manufacturing, Study of Large Enterprise Groups*, 1972–73 (12.35), *Foreign Ownership and Control of the Mining Industry*, 1973–74 and 1974–75 (10.42), *Foreign Ownership and Control of General Insurance Business*, 1972–73 (5.52), *Foreign Ownership and Control of Life Insurance Business*, 1973 (5.53), *Foreign Ownership and Control of Finance Companies*, 1973 (5.50), *Foreign Ownership and Control of Tourist Accommodation Establishments*, 1973–74 (11.47) and *Foreign Ownership and Control of Accredited Advertising Agencies*, 1974–75 (17.28).

Foreign Ownership

Foreign ownership of a statistical unit (establishment, enterprise, etc.) is measured in terms of the total beneficial equity interest in that unit held by all identified foreign residents (enterprises and persons). Equity interest in companies is measured by the percentage paid-up value of voting shares held, with equivalent measures of equity interest being used for unincorporated enterprises.

Foreign ownership is classified into *direct foreign ownership* and *other identified foreign ownership*. *Direct foreign ownership* is defined as ownership of at least 25 per cent of equity by a foreign resident (person, company or group of related companies). *Other identified foreign ownership* is the remaining foreign ownership by way of portfolio investment that can be traced to a statistical unit. The procedures for indentifying this latter component of foreign ownership have varied somewhat between studies and, consequently, the percentages of 'other identified foreign ownership' and 'total foreign ownership' given in the following table are not exactly comparable between industries.

To obtain aggregate measures of the extent of foreign ownership in a particular industry, operations data for each statistical unit in the industry are apportioned to 'foreign ownership' and 'Australian ownership' in proportion to the percentage of foreign and Australian ownership in that unit and the results summed over all units in the industry.

Foreign Control

Broadly, a company in Australia is classified as *foreign-controlled* if a single foreign resident (person or company) holds at least 25 per cent of the paid-up value of its voting shares (or equivalent equity interest in the case of unincorporated enterprises), provided that there is no larger holding by an Australian-controlled enterprise or Australian resident person. Under this definition, enterprises in which there is an *equal* holding by an Australian-controlled enterprise or Australian resident person are classified as *foreign-controlled.* All enterprises not classified as foreign-controlled are classified as *Australian-controlled.*

It is to be noted that the classification to foreign control is based on statistical criteria which may not accord with the realities of control in any given case. The statistics on foreign control therefore should be understood to be subject to that important qualification.

To obtain aggregate measures of the extent of foreign control of an industry, operations data for each statistical unit in that industry are allocated wholly to the appropriate control category for that unit and the results summed over all units in the industry.

In the following table the classification by country of foreign control is based on the country of domicile of the foreign resident who holds the controlling interest (of 25 per cent or more). This may not correspond to the country of ultimate control since the foreign resident may be a company that is controlled by residents of another country.

FOREIGN OWNERSHIP OF AUSTRALIAN INDUSTRIES

Industry and period	*Foreign/Aust. ownership measured in terms of*	*Foreign ownership*			*Australian ownership*	*Total*	*Total*
		Direct foreign ownership	*Other identified foreign ownership*	*Total foreign ownership*			
		per cent	per cent	per cent	per cent	per cent	$ million
Manufacturing 1972–73	value added	27.7	3.5	31.2	68.8	100.0	10,746
Mining 1974–75	value added	40.9	10.9	51.8	48.2	100.0	2,641
General insurance business 1972–73	premiums received	41.4	4.3	45.7	54.3	100.0	1,323
Life insurance business 1973	premiums received	18.8	18.0	36.8	63.2	100.0	1,101
Finance companies 1973	balances outstanding	26.6	21.3	48.0	52.0	100.0	8,446
Tourist accommodation establishments 1973–74	total takings	2.3	1.2	3.5	96.5	100.0	1,361
Accredited advertising agencies 1974–75	turnover	42.5	0.3	42.8	57.2	100.0	464

FOREIGN CONTROL OF AUSTRALIAN INDUSTRIES

Industry and period	*Foreign/Aust. control measured in terms of*	*Foreign control*				*Australian control*	*Total*	*Total*
		United Kingdom	*United States of America*	*Other*	*Total*			
		per cent	per cent	per cent	per cent	per cent	per cent	$ million
Manufacturing 1974–75	value added	16.2	13.1	5.0	34.3	65.7	100.0	10,746
Mining 1974–75	value added	12.6	40.6	5.7	58.9	41.1	100.0	6,641
General insurance business 1972–73	premiums received	31.6	2.9	10.5	45.0	55.0	100.0	1,323
Life insurance business 1973	premiums received	13.9	2.1	3.4	19.4	80.6	100.0	1,101
Finance companies 1973	balances outstanding	19.5	17.5	4.5	41.5	58.5	100.0	8,446
Tourist accommodation establishments 1973–74	total takings	1.2	0.7	2.3	4.3	95.7	100.0	1,361
Accredited advertising agencies 1974–75	turnover	6.4	44.5	..	50.9	49.1	100.0	464

INDEXES OF VALUES OF EXPORTS AND IMPORTS AT CONSTANT PRICES

The following tables show annual indexes of the values of Australian exports and imports of merchandise at constant (average 1966–67) prices. Further information concerning the sources and methods used in compiling the series is contained in the bulletin *Exports and Imports of Merchandise at Constant Prices* (8.21) published on 10 October 1968. Quarterly figures in original and seasonally adjusted terms are published regularly in the bulletin *Exports and Imports of Merchandise at Constant Prices* (8.22).

Nature of the indexes

Indexes of this type are designed to provide, in convenient summary form, measures of change in the quantum of exports and imports. They are sometimes referred to as measures of change in the volume of exports and imports, though strictly speaking they measure change in the value of exports and imports after the direct effects of price changes have been eliminated. Measures of this type are, of necessity, subject to approximations and assumptions, and they should not be interpreted in any precise quantitative sense.

In concept, the indexes may be thought of as being derived by expressing the value of each export or import item as the product of a price and a quantity, and by then substituting for each actual current price the corresponding price in the chosen base year. The total value of exports or imports in the current year, expressed at the prices of the base year, is then obtained by summing and is converted to an index number by dividing by the total value of exports or imports in the base year. Indexes so derived may be described as 'fixed-weight' indexes, the weights of individual items in the composite measure being determined by their relative prices in the base year. It follows that the choice of a particular base year will normally affect the trend of such indexes (so long as there are variations in the rate of change in quantity of individual items, and variations in relative prices of such items from one year to the next).

The indexes are compiled on the basis of recorded statistics of exports and imports of merchandise. They should therefore be interpreted in conjunction with the statistics of overseas trade published by the Australian Bureau of Statistics. In particular, it should be noted that in overseas trade statistics (and in the index series derived from them) all values are determined on a 'free on board (f.o.b.) port of shipment' basis so that charges such as the cost of freight and insurance incurred after the goods have been exported from the port of shipment are excluded. It should also be noted that the indexes published below exclude from their scope non-merchandise trade as currently defined (i.e. Sections 9B of the new commodity classifications which contain commodities such as gold, legal tender, decorations, trophies, samples, passengers' personal effects, military equipment and stores for Australian forces abroad).

EXPORTS OF MERCHANDISE
Indexes of Values at Average 1966-67 Prices
(*Base: Year* 1966–67 = 100)

	Food and live animals								
	Meat and meat preparations	*Cereal grains and cereal preparations*	*Other (dairy produce, fruit, sugar, etc.)*	*Total*	*Wool and sheepskins*	*Metalliferous ores and metal scrap*	*Metal manufactures, machinery, transport equipment*	*Other exports*	*All exports of merchandise*
Percentage of total value of exports in 1966–67(*a*)	9.5	15.8	12.5	37.8	29.7	5.6	14.2	12.7	100.0
1966-67	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
1967–68	100	94	99	97	102	147	100	121	105
1968–69	98	80	102	92	107	211	116	147	114
1969–70	132	106	100	111	115	302	151	174	136
1970–71	135	146	109	131	105	385	156	189	148
1971–72	167	150	111	141	113	392	186	217	163
1972–73	214	95	126	135	108	474	226	237	172
1973–74	158	93	112	116	77	553	186	268	158
1974–75	136	141	102	127	75	597	201	272	167

IMPORTS OF MERCHANDISE
Indexes of Values at Average 1966-67 Prices
(*Base: Year* 1966–67 = 100)

	Food, beverages, and tobacco	*Fuels*	*Basic materials*	*Chemicals (including plastics)*	*Textiles, fabrics, etc.*	*Metal manufactures, machinery, transport equipment*	*Other imports*	*All imports of merchandise*
Percentage of total value of imports in 1966–67(*a*)	5.2	8.2	7.4	9.9	8.0	43.3	18.0	100.0
1966-67	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
1967–68	99	100	107	109	107	111	111	109
1968–69	110	105	106	123	114	116	121	116
1969–70	116	111	112	132	122	127	137	126
1970–71	120	81	108	145	127	133	152	130
1971–72	124	71	104	139	133	113	153	121
1972–73	127	64	125	150	143	115	164	129
1973–74	156	67	152	176	208	165	212	167
1974–75	161	63	110	167	178	188	217	170

(*a*) These percentages may be used in analysing the contribution of each group to movements in the total index.

CHAPTER 12

TRANSPORT AND COMMUNICATION

The statistics in this chapter relate in the main to the year 1974–75, with comparisons restricted to a few recent years. More detailed figures and particulars for earlier years are included in the annual bulletins, *Rail, Bus and Air Transport* (14.21), *Public Authority Finance—Federal Authorities* (5.12), and in the annual mimeographed statement *Motor Vehicle Registrations* (14.1). Current information on subjects dealt with in this chapter appears in the *Monthly Review of Business Statistics* (1.4), the *Digest of Current Economic Statistics* (1.5), *Overseas and Coastal Shipping* (annual) (14.10), *Motor Vehicle Registrations* (quarterly) (14.2), one preliminary monthly statement *Registration of New Motor Vehicles* (14.6), two quarterly bulletins *Road Traffic Accidents involving Casualties* (14.9), (14.14), *Road Accident Fatalities* (monthly) (14.13).

Information additional to that contained in Bureau publications is available in the annual reports and other statements of the Department of Transport, the various harbour boards and trusts, the several Government railway authorities, the Australian Postal Commission, the Australian Telecommunications Commission, the Australian Broadcasting Control Board, and the Australian Broadcasting Commission.

THE AUSTRALIAN TRANSPORT ADVISORY COUNCIL

In April 1946, the State and Commonwealth Governments agreed to establish a co-ordinating and advisory committee at Ministerial level to review annually the various laws and regulations deemed necessary to safeguard the interests of the State Governments and road users generally and to consider matters of transport policy.

The Australian Transport Advisory Council (A.T.A.C.) thus established is comprised of the Commonwealth Minister for Transport as Chairman, the Minister for the Capital Territory and Minister for the Northern Territory and each State Minister for Transport.

The Council primarily considers policy matters relating to transport operations, co-ordination and development. Its functions are: to initiate discussion and report to the respective Governments as necessary on any matter raised by the Council, or any State or Commonwealth Government Authority; generally to exercise its purely advisory functions, and to report as necessary to the respective Governments concerned on any matter which will tend to promote a better co-ordination of transport development, while at the same time encouraging modernisation and innovation to meet changing needs; and to assist in maintaining continuous and comprehensive research in relation to transport development in Australia and abroad; such research to be carried out for the benefit of Australian Transport authorities and agencies.

The regulation of and the executive responsibility for transport is shared between the Commonwealth and State Governments. A.T.A.C. is the meeting ground at a Ministerial level and provides an effective means for inviting discussion and reaching uniformity of approach towards transport administrative procedures and policy. It also provides a means for reviewing and discussing national solutions of transport problems and the rectification of transport deficiencies generally. The Council has been active in: the establishment of special committees and conferences to examine and report on specific problems such as road safety, motor vehicle standards and safety features, motor vehicle emissions, transport economic research, highway planning, level crossing accidents, blood tests for road users, driver improvement, pedestrian behaviour, etc.; the exchange of views and formulation of common policies on a wide range of transport matters; effecting at ministerial level Commonwealth-State and interstate co-operation on such matters as construction and operation of interstate railway links, collecting of fines and fees interstate, policing of regulations, etc.; and the publication of comprehensive surveys of Australian transport.

Typical of matters A.T.A.C. has examined from time to time are the following: the effect of standardisation of railway gauges on other modes of transport; advanced national policies of road development and research; transport in relation to interstate tourist traffic; standardisation of traffic signs and road signs; standard and improved statistical data relating to transport of passengers and goods; uniform road traffic laws and standards for motor vehicle design and equipment; control of emissions from motor vehicles; pipelines as a transport medium; and containerisation and the need for uniform legislation, particularly in relation to maximum weights of road vehicles.

Details of the advisory committees established at February 1973 by the Transport Advisory Council are given in Year Book No. 59, pages 330–1.

SHIPPING

Control of shipping

Commonwealth Government navigation and shipping legislation

For an outline of the development and scope of Commonwealth Government legislation, *see* Year Book No. 55, pages 366–7.

Commonwealth Government Acts concerned with shipping are: the *Navigation Act* 1912, the *Sea Carriage of Goods Act* 1924, the *Seamen's Compensation Act* 1911, the *Seamen's War Pensions and Allowances Act* 1940, the *Pollution of the Sea by Oil Act* 1960, the *Pollution (Shipping Levy) Act* 1972, the *Pollution (Shipping Levy Collection) Act* 1972, the *Australian Shipping Commission Act* 1956, the *Australian Coastal Shipping Agreement Act* 1956, the *Stevedoring Industry Act* 1956, the *Beaches, Fishing Grounds and Sea Routes Protection Act* 1932, the *Submarine Cables and Pipelines Protection Act* 1963, the *Lighthouses Act* 1911, the *Explosives Act* 1961, the *Inter-State Commission Act* 1975, the *King Island Harbour Agreement Act* 1973, the *King Island Shipping Service Agreement Act* 1974 and the *Ship Construction Bounty Act* 1975.

Australian Shipping Commission

The Commission was established by the *Australian Coastal Shipping Commission Act* 1956. The Commission's role is to establish, maintain and operate interstate, overseas and territorial shipping services. In October 1974 when the Act was amended the title was changed to the Australian Shipping Commission to reflect the increasing importance of overseas trading activities. As at 31 December 1975 the Commission, operating as the Australian National Line, owned and/or operated a fleet of 34 vessels.

The fleet includes seven vessels engaged in overseas trading; five vehicle deck cargo ships, *Australian Emblem* 23,481 tonnes deadweight, *Australian Escort* 23,481 tonnes deadweight, *Australian Enterprise* 14,308 tonnes deadweight, *Australian Explorer* 14,151 tonnes deadweight and *Allunga* 20,626 tonnes deadweight; and two cellular container ships *Australian Endeavour* 26,844 tonnes deadweight and *Australian Exporter* 26,515 tonnes deadweight. The coastal fleet of 27 vessels includes two vehicle deck passenger ships, *Empress of Australia* 2,725 tonnes deadweight and *Australian Trader* 3,479 tonnes deadweight; six vehicle deck cargo ships totalling 35,175 tonnes deadweight; one container/bulkship of 12,093 tonnes deadweight in the Darwin trade; two bulk carriers in the 100,000 tonnes deadweight class; four bulk carriers in the 50–100,000 tonnes deadweight class; eleven other bulk carriers each less than 50,000 tonnes deadweight totalling 132,941 tonnes deadweight; and one 3,261 tonnes deadweight cellular container ship.

The Line has two 25,000 tonnes deadweight bulk carriers and one 5,500 tonnes deadweight vehicle deck (cargo ship) under construction in an Australian yard. Two 121,000 and two 139,000 tonnes deadweight bulk carriers, and one 29,000 tonnes deadweight cellular container vessel are also under construction in overseas yards.

The Line operates specialised terminals at Adelaide, Melbourne, Geelong, Burnie, Devonport, Bell Bay, Hobart, Sydney, Port Kembla, Brisbane, Rockhampton (Port Alma), Mackay, Townsville, Cairns and Darwin.

The vehicular passenger ships *Empress of Australia* and *Australian Trader* carry passengers between the mainland and Tasmania. In the year ended 30 June 1974 they carried 128,940 passengers and the year ended 30 June 1975 a record 133,591 passengers. During the same periods 9.3 and 10.4 million tonnes of cargo respectively, were carried by Australian National Line vessels.

Australian Shipbuilding Board

Advice to the Minister on the shipbuilding industry, including recommendations on bounty for each particular shipbuilding proposal, is provided by the Australian Shipbuilding Board. This Board has a membership of six including a representative of the Naval Board and of the Trade Union movement.

To 31 December 1975, 329 vessels valued at approximately $734 million had been completed by Australian shipyards. Seventy-two of the vessels (ranging from customs launches to survey and research vessels, landing craft and lighthouse supply vessels, were built for the Commonwealth Government. The remaining 257 were built under the Commonwealth's subsidy scheme for other ship owners, including the Australian National Line.

Three major Australian shipyards are building merchant vessels—one in South Australia, and two in New South Wales: two other shipyards are engaged principally in naval shipbuilding—one in New South Wales and one in Victoria. There are numerous smaller yards building fishing vessels and other small craft and many builders of wooden commercial and pleasure boats.

Shipbuilding Assistance

The shipbuilding industry in Australia has been given Government assistance since the introduction of the shipbuilding subsidy scheme in 1947. The level of maximum subsidy has been determined by the Government on the basis of enquiries into the industry by the former Tariff Board now the Industries Assistance Commission. These enquiries have been held in 1954, 1959, 1963, and 1969.

Present policy is given effect by the *Ship Construction Bounty Act* 1975. Assistance is by way of a bounty at a fixed percentage dependant upon the size of the vessel and for maximum bounty, the date upon which construction was commenced in the shipyard. This rate is applied to the lowest acceptable Australian tender received as a result of public calling of tenders with appropriate deductions applied for items ineligible for bounty. Under the policy Australian owners may seek approval to import ships when overseas prices are less than the bounty-paid Australian price.

Vessels eligible for the bounty are fishing vessels of 21 metres length and above and other vessels of 150 tons Gross (Construction) Tonnage and above. For the smallest vessels bounty is at 25 per cent; this rising at 2½ per cent per 1,000 tons gross to the maximum. The maximum in 1976 is 35 per cent. This diminishes to a long-term rate of 25 per cent for vessels commenced in 1981. The policy and administration of the policy on shipbuilding assistance is the responsibility of the Minister for Industry and Commerce.

Australian Stevedoring Industry Authority

In June 1949 legislation was enacted to abolish the Stevedoring Industry Commission, on which employers and employees were represented, and establish in its place a Stevedoring Industry Board of three members, to attend to administrative matters formerly under the control of the Commission. The industrial functions which previously came within the province of the Commission were assigned to a single Judge of the Commonwealth Court of Conciliation and Arbitration. In August 1956, the Stevedoring Industry Board was replaced by the Australian Stevedoring Industry Authority of three members, including a representative of the management side of industry and a representative of the trade union movement. At the same time the judicial and non-judicial functions formerly exercised by the Commonwealth Court of Conciliation and Arbitration were divided between the Commonwealth Industrial Court and the Commonwealth Conciliation and Arbitration Commission respectively. Awards of the Conciliation and Arbitration Commission subsequently placed payment of sick pay, public holiday pay and annual leave under the administration of the Authority. Under amending legislation, which operated from 6 June 1961, the Authority became responsible for payment of long service leave to registered waterside workers, and its disciplinary powers were strengthened to reduce the time lost through unauthorised stoppages. Further amending legislation which operated from 8 October 1965 made the Authority responsible for the recruitment of waterside workers. In July 1970, by legislative amendment, the management and union positions on the Authority were abolished. The functions of the Authority are now exercised by one full-time Director.

Following adoption of the General Report of the National Stevedoring Industry conference of April 1967, the *Stevedoring Industry* (*Temporary Provisions*) *Act* 1967 provided for permanent employment of registered waterside workers. This was introduced in Sydney in November 1967 and has since been extended to all the principal ports. Arrangements for a permanent labour force in small ports throughout Australia was introduced into Darwin in November 1974 and into Northern Tasmanian ports and the port of Hobart in November 1975 and January 1976 respectively. Operation of the *Stevedoring Industry* (*Temporary Provisions*) *Act*, initially for a period of three years, was extended in 1970, 1972, 1973 and 1974 and is currently due to expire on 30 June 1976.

In July 1970 the National Stevedoring Industry Conference was given a statutory basis and redesignated the Stevedoring Industry Council. The Council is constituted along the same lines as the National Stevedoring Industry Conference. Its functions are primarily to advise the Minister for Employment and Industrial Relations on the operation of the existing employment arrangements, the development of new employment schemes and such other matters as the Minister might refer to it. It is also required to endeavour to bring about amicable agreement in relation to industrial questions in the industry.

The statutory provisions relating to the industry are now contained in the *Stevedoring Industry Act* 1956, the *Stevedoring Industry Act* 1965, the *Stevedoring Industry* (*Temporary Provisions*) *Act* 1967, the *Stevedoring Industry Charge Act* 1947, the *Stevedoring Industry Charge Assessment Act* 1947 and Division 4 of Part III of the *Conciliation and Arbitration Act* 1904.

Trade Practices Act 1974 (Part X—Overseas Cargo Shipping)

The Overseas Cargo Shipping provisions of the Trade Practices Act are administered by the Minister for Transport.

The principal object of the Overseas Cargo Shipping provisions is the control of the operations of shipping conferences (associations into which shipowners have traditionally combined) and of individual shipowners in relation to the carriage of goods by sea from Australia to other countries. To achieve that object the provisions are designed to facilitate negotiations between shipowners and 'The Australian Shippers' Council', an association, designated under the Act by the Minister, that represents the interests of shippers and producers of goods exported from Australia.

Regarding shipping conferences, the provisions require certain agreements of a specified character between shipowners operating in the outward trades from Australia to be filed with the Clerk of Shipping Agreements. A shipowner who is a party to such an agreement may be requested, by the Minister, to give to the Minister an undertaking to negotiate with the Council with regard to the arrangements for, and the terms and conditions that are applicable to, cargo shipping to which the agreement relates. Whether such a shipowner has failed so to negotiate or whether the services provided pursuant to the agreement are adequate, efficient or economical, are matters that may be referred by the Minister for enquiry and report by the Trade Practices Tribunal. Certain powers are vested in the Governor-General to disapprove the agreement after consideration of a report by the Tribunal to the Minister. A probable effect of such a disapproval would be to force a shipowner party to the agreement to carry on its business in the absence of any agreement with other shipowners. The Governor-General may, however, in his discretion approve such a shipowner entering into another agreement.

Provisions, similar to the provisions in respect of shipping conferences, apply in respect of individual shipowners. In addition, an individual shipowner may, as a result of a declaration by the Governor-General, be prohibited from engaging in certain specified activities in carrying on its business, for example engaging in freight cutting with the object of substantially damaging the business of another shipowner.

The provisions also protect the rights of efficient Australian flag operators to participate to a reasonable extent in overseas cargo shipping.

Maritime Industry Commission of Inquiry

The Commission was established in September 1973 with the following terms of reference:

To ensure that the development of the Australian maritime industry proceeds in harmony with the overall transportation policies and general economic and social aims of the Government and that that development should have full regard to the encouragement of the best use of manpower resources, the application of modern technological developments and the promotion of safe and efficient working operations.

To inquire into, and report upon, all matters related to the development of the Australian maritime industry, so far as they are matters connected with the peace, order and good government of the Commonwealth and are relevant to the exercise and performance of the powers of the Australian Parliament or the performance of the functions of the Australian Government, and to make recommendations for a comprehensive framework for the long-term development of that industry, having regard to the foregoing objectives and the best overseas' policies and practices and recommendations for the specific programs of action required to achieve those objectives.

The inquiry and recommendations shall include, in addition to all other relevant matters, the following specific matters, namely:

the need for revision and modernisation of existing legislation;

the most appropriate administrative and organisational arrangements for the exercise of operational and safety policies, standards and controls over the maritime industry;

the significance of international treaties, conventions and agreements for the industry, and the need for Australian initiatives in relation thereto;

a desirable program for modernisation and extension of navigational aid systems;

the adequacy of existing port and associated facilities and their future development requirements, having regard to such factors as location, capacity and user needs, and the requirements of interstate and international trade and commerce; and

the training requirements of the industry, including the establishment of an Australian Merchant Marine College.

The Commission completed its work in June 1976, having submitted seven reports as follows:

Report on the Training Requirements of Sea-going Personnel, May 1974;
Report on Navigational Aid Systems, November 1974;
Report on Adequacy of Australia's Ports, February 1976;
Report on Australian Maritime Legislation, June 1976;
Report on Maritime Standards and Controls, June 1976;
Report on International Maritime Conventions, June 1976; and
Report on The Future of the Australian Maritime Industry, June 1976.

Collection and presentation of statistics

Basic documents

From 1 July 1966 shipping statistics have been compiled by the Australian Bureau of Statistics from returns submitted by shipping companies or their representatives to Customs Houses at the various seaports throughout Australia. A return is required for the departure of a vessel from a port as well as for its arrival at that port.

Scope of the statistics

Arrivals and departures of vessels are treated separately in shipping statistics. Not all vessels are included in the statistics as returns are not required for (i) naval vessels; (ii) yachts and other craft used for pleasure; (iii) foreign fishing vessels that neither load nor discharge cargo; (iv) Australian registered fishing vessels operating from Australian ports; (v) geographical survey vessels, seismic survey vessels, oceanographic survey vessels; (vi) offshore oil drilling rigs and vessels servicing them; (vii) vessels of 200 registered net tons and under.

Period covered by the statistics

Monthly shipping statistics relate to vessels arriving at and departing from each port in a calendar month. Annual statistics are published on a financial year basis.

Statistics of vessels

Statistics of vessels are compiled in terms of registered net tonnages. Net tonnage is expressed in units of 100 cubic feet (i.e. 100 cu ft equals 1 ton) and represents the volume of enclosed space which can be utilised for cargo or passengers.

Statistics of vessel movements

Returns show the last or next port of call of a vessel according to whether an arrival or departure at a port is being reported. Each vessel is classified to either the overseas or the coastal fleets serving Australia. This information, supplemented by the voyage of the vessel indicated by ports it visits to load or discharge cargo, is the basis on which each vessel movement is allocated to one of the following classifications: overseas direct; overseas via other States; interstate direct; interstate via ports in the same State; intrastate.

Cargo loaded or discharged

Returns for arrivals show cargo discharged, and for departures cargo loaded, in terms of tonnes or cubic metres, depending on the basis on which freight is charged.

Type of service

Overseas shipping cargo statistics are classified by type of service. Coastal shipping cargo statistics, on the other hand, combine all service types.

For overseas shipping, cargo shipped in liners is shown separately from cargo shipped in tramps, bulkships and tankers. A liner is a vessel which, on the voyage on which cargo is loaded or discharged at an Australian port, is operated to provide services on a specified route on a relatively regular basis.

Statistics of cargo shipped in liner services do not necessarily provide a measure of cargo carried by ships operating under shipping conference arrangements. For example, liner services may be provided by shipping companies which are not parties to conference agreements. Cargo may also be shipped under shipping conference conditions in vessels operating on a voyage charter basis for specific cargo, and, in the statistics, such cargo is classified as cargo shipped in tramp vessels.

Country of loading or discharge of overseas cargo

In statistics of overseas shipping cargo, country of loading or discharge of cargo is the country of location of the port where the cargo was loaded on to, or is to be discharged from, a reporting vessel. The countries shown are not necessarily the countries of origin or ultimate destination of cargo because previous or subsequent transhipments of cargo are not taken into account. The statistics of cargo classified by the country in which it was loaded or discharged cannot therefore be compared directly with statistics of overseas trade classified by country of origin or consignment.

Transhipments of cargo within Australia

The State of loading or discharge shown in the statistics is the State in which cargo is loaded onto, or discharged from, reporting vessels. Cargo loaded in a given State can therefore include cargo previously shipped interstate, while cargo discharged can include cargo which would subsequently be shipped interstate.

Units of measurement

Deadweight tonnage. A measure of the total mass (weight) of cargo, fuel, potable water, boiler feed water, ballast, stores, crew and their gear, etc. It is equal to loaded displacement tonnage less light displacement tonnage.

Gross tonnage. A measure of the enclosed internal volume of a ship and its superstructure, with certain spaces exempted. It is also an indicator of the total volumetric size of a ship.

Net tonnage. A volumetric measure consisting of the gross tonnage less the volume of non-earning spaces, e.g. master's cabin, crew accommodation, wheelhouse, galley, etc., and an allowance for machinery spaces. Volumetric measurement of ships have not yet been converted to metric.

Overseas shipping

Total movement

The following table shows the sum of the number of vessels entered and cleared direct from and to overseas countries, and the aggregate net tonnage involved.

OVERSEAS SHIPPING: VESSELS ENTERED AND CLEARED (COMBINED), AUSTRALIA(*a*)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Number of vessels		11,054	10,886	11,278	11,844	12,395
Net tonnage . . .	'000 tons	102,219	106,636	124,659	143,148	159,577

(*a*) Excludes vessels of 200 net tons and under.

Particulars of the total overseas movement of shipping for each year from 1822 to 1920–21 were published in Year Book No. 15, page 507, those for each year from 1921–22 to 1950–51 in Year Book No. 40, page 97, while those for each year from 1947–48 are shown in the Statistical Summary of this Year Book.

Total overseas shipping

The following table shows, for each State and the Northern Territory, the number of vessels entered and cleared direct from and to overseas countries, and the aggregate net tonnage involved.

OVERSEAS SHIPPING: VESSELS ENTERED AND CLEARED(*a*)
1974–75

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Entered . . .	number	1,598	708	1,136	321	2,049	188	184	6,184
	'000 net tons	15,394	4,877	14,320	2,535	37,855	2,664	2,668	80,313
Cleared . . .	number	1,324	606	1,373	355	2,240	134	179	6,211
	'000 net tons	12,764	4,384	16,131	2,305	39,470	2,330	2,401	79,786

(*a*) Excludes vessels of 200 net tons and under.

Country of registration of overseas shipping

Particulars of overseas shipping which entered Australian ports are given in the following table according to country of registration of vessels.

OVERSEAS SHIPPING: VESSELS ENTERED DIRECT, BY COUNTRY OF REGISTRATION, AUSTRALIA(*a*)

('000 net tons)

Country of registration of vessels	*1972–73*	*1973–74*	*1974–75*
Australia	358	331	398
Denmark	909	884	1,022
France	533	171	124
Germany, Federal Republic of	2,022	2,377	2,575
Greece	3,179	4,957	4,248
Hong Kong	262	229	345
India	607	1,496	1,548
Italy	752	913	978
Japan	19,900	20,751	22,904
Liberia	8,044	10,077	11,876
Netherlands	1,061	1,181	1,218
New Zealand	328	363	289
Norway	6,528	8,130	7,909
Panama	1,159	2,235	3,189
Sweden	1,143	1,423	1,506
United Kingdom	11,246	10,828	12,263
United States of America	308	618	860
Other countries	4,289	5,078	7,061
All countries—			
In cargo	17,736	19,558	19,764
Proportion of total %	28.3	27.1	24.6
In ballast	44,892	52,484	60,549
Proportion of total %	71.7	72.9	75.4
Grand Total	**62,628**	**72,042**	**80,313**

(*a*) Excludes vessels of 200 net tons and under.

Australian registered tonnage which entered Australian ports from overseas during the year 1974–1975 represented 0.50 per cent of the total tonnage entered.

Interstate shipping

Interstate movement

Interstate direct. The following table shows the number of coastal vessels entered and the net tonnage recorded into each State and the Northern Territory from any other State during 1974-75. The statistics below are not comparable with those for years prior to 1969-70 because the method of applying the classifications 'overseas' and 'interstate' has been changed. Before July 1969 movements of overseas vessels carrying cargo between two Australian States were classified as 'interstate direct' and were, therefore, included in these statistics. Since July 1969 overseas vessels carrying cargo between two Australian States have been classified as 'overseas via States' and are, therefore, excluded from these statistics. The difference in treatment arose from the practice of classifying movements between two Australian States on the basis of port of loading and port of discharge, whereas the current method classifies these movements on the basis of whether the vessel is considered to be an overseas or a coastal one. Total interstate movements by coastal and overseas vessels are shown in *Total interstate movements* below.

INTERSTATE MOVEMENT: COASTAL VESSELS ENTERED INTERSTATE DIRECT 1974–75(*a*)

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Number of vessels		1,001	1,327	303	467	246	1,161	89	4,594
Net tonnage	'000 tons	7,710	6,806	2,211	2,576	3,314	2,928	360	25,905

(*a*) Excludes vessels of 200 net tons and under.

Overseas via States. The figures in the following table show the number and aggregate net tonnage of overseas vessels entered and cleared which, having arrived at an Australian port direct from an overseas port, continue their voyages from/to overseas countries via other Australian States. The statistics in the following table are not comparable with those prior to 1 July 1969 because of the change in method of classifying some overseas vessel movements referred to under *Interstate direct, see* above.

INTERSTATE MOVEMENT: OVERSEAS VESSELS ENTERED AND CLEARED VIA OTHER AUSTRALIAN STATES, 1974–75(*a*)

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Entered	number	1,522	1,388	1,111	702	813	352	56	5,944
	'000 net tons	10,627	8,933	6,986	4,221	6,174	1,644	621	39,205
Cleared	number	1,819	1,495	857	666	637	404	61	5,939
	'000 net tons	13,347	9,466	4,953	4,438	4,872	1,948	341	39,366

(*a*) Excludes vessels of 200 net tons and under.

Total interstate movement. The following table shows, for each State and the Northern Territory, the total number of vessels entered from and cleared for other States during the year 1974–75 together with the aggregate net tonnage.

INTERSTATE MOVEMENT: TOTAL VESSELS ENTERED AND CLEARED, STATES AND NORTHERN TERRITORY, 1974–75(*a*)

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Entered . . .	number	2,577	2,726	1,619	1,224	1,110	1,602	163	11,021
	'000 net tons	18,627	15,813	9,829	7,204	9,659	4,964	1,026	67,123
Cleared . . .	number	2,866	2,862	1,324	1,144	1,008	1,624	167	10,995
	'000 net tons	21,070	16,648	7,558	7,093	8,838	5,068	732	67,007

(*a*) Excludes vessels of 200 net tons and under.

The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States, for Australia.

INTERSTATE MOVEMENT: TOTAL VESSELS ENTERED AND CLEARED, AUSTRALIA (*a*)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Entered . . .	number	12,169	12,128	11,686	11,423	11,021
	'000 net tons	65,141	66,140	65,363	67,182	67,123
Cleared . . .	number	12,113	12,146	11,633	11,426	10,995
	'000 net tons	64,843	66,228	65,273	67,229	67,007

(*a*) Excludes vessels of 200 net tons and under.

Australian trading vessels

The following table shows particulars of all Australian trading vessels of 200 gross tons or more engaged in the regular overseas, interstate or intrastate services at 31 December 1975.

AUSTRALIAN TRADING VESSELS OF 200 GROSS TONS OR MORE 31 DECEMBER 1975

(*Source:* Department of Transport)

Vessels	*Number*	*Deadweight tonnes*	*Gross tons*
Interstate vessels—			
Australian-owned, Australian-registered	64	1,066,044	726,251
Overseas-owned, Australian-registered, engaged in Australian coastal trade—			
New Zealand-owned	3	10,571	10,015
Other	5	147,116	94,044
Australian-owned, overseas-registered	2	44,045	25,056
Overseas-owned, overseas-registered, on charter, engaged in Australian coastal trade	12	687,640	375,661
Total interstate vessels	86	1,955,416	1,231,027
Intrastate vessels	20	213,715	132,923
Total coastal trading vessels	*106*	*2,169,131*	*1,363,950*
Overseas trading vessels—			
Australian-registered	9	172,114	138,855
Overseas-registered	5	110,148	69,319
Total overseas trading vessels	*14*	*282,262*	*208,174*
Total Australian trading vessels	**120**	**2,451,393**	**1,572,124**

Shipping at principal ports

For details of Harbour Boards and Trusts in each State *see* the chapter Public Finance.

The following table shows the total volume of shipping—overseas and coastal—entering the principal ports of Australia.

TOTAL SHIPPING: VESSELS ENTERED AT PRINCIPAL PORTS, AUSTRALIA(*a*)

Port of entry	*1973–74*		*1974–75*	
	Number	*Net tons*	*Number*	*Net tons*
		'000		'000
New South Wales—				
Sydney(*b*)	2,971	16,577	2,925	16,481
Newcastle	1,144	8,369	1,377	9,093
Port Kembla	845	6,663	804	7,401
Victoria—				
Melbourne	2,524	12,709	2,608	13,059
Geelong	458	3,282	420	2,936
Queensland—				
Brisbane	1,302	8,068	1,246	8,573
Bowen	29	110	26	74
Cairns	206	827	176	696
Gladstone	421	6,596	429	7,005
Mackay	211	956	225	1,056
Rockhampton	101	391	80	299
Townsville	353	1,643	328	1,700
Weipa	261	4,430	285	5,337
South Australia—				
Adelaide(*c*)	1,117	4,039	1,108	4,087
Port Lincoln	148	681	158	809
Port Pirie	163	910	146	863
Rapid Bay	27	120	39	113
Wallaroo	29	200	37	270
Whyalla	285	2,415	311	2,369
Western Australia—				
Fremantle(*d*)	1,173	8,531	1,243	9,556
Albany	143	863	127	855
Bunbury	144	892	154	937
Carnarvon	18	32	16	27
Geraldton	115	766	109	811
Yampi	110	1,031	130	1,577
Port Hedland	655	14,486	639	15,749
Dampier	532	10,877	532	12,487
Tasmania—				
Hobart	534	1,624	505	1,594
Burnie	359	1,315	344	1,398
Devonport	448	1,299	422	1,247
Launceston	420	2,496	413	2,314
Port Latta	43	883	40	716
Northern Territory—				
Darwin	162	868	134	670
Groote Island	95	673	96	700

(*a*) Excludes vessels of 200 net tons and under. (*b*) Includes Botany Bay. (*c*) Includes Port Stanvac. (*d*) Includes Kwinana.

Shipping cargo

Overseas and interstate cargo

The table on page 376 shows the aggregate tonnage of overseas and interstate cargo discharged and loaded at principal Australian ports.

CARGO DISCHARGED AND LOADED: AUSTRALIA
('000)

Year	*Overseas cargo*				*Interstate cargo*			
	Discharged		*Loaded*		*Discharged*		*Loaded*	
	Tonnes	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*
1970–71	21,754	5,742	101,818	2,959	24,171	2,722	24,934	2,485
1971–72	19,505	5,865	108,047	3,161	25,801	3,087	26,387	2,799
1972–73	20,167	6,084	132,362	3,555	27,364	3,136	28,006	2,927
1973–74	23,055	7,641	150,471	3,071	28,570	3,224	29,471	3,034
1974–75	21,893	8,029	164,866	2,926	27,864	3,201	28,454	3,143

CARGO DISCHARGED AND LOADED AT PRINCIPAL PORTS, 1974–75
('000)

	Overseas cargo				*Interstate cargo*			
	Discharged		*Loaded*		*Discharged*		*Loaded*	
Port	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*
New South Wales—								
Sydney	2,936	2,520	5,394	1,105	1,887	307	269	248
Botany Bay	1,674	..	43	..	3,866	..	54	..
Newcastle	1,438	18	10,445	61	3,416	..	1,114	18
Port Kembla	916	12	4,202	..	6,681	19	1,936	8
Other	32	..	319	137	32	..	23	..
Total New South Wales	*6,996*	*2,550*	*20,403*	*1,303*	*15,882*	*326*	*3,396*	*273*
Victoria—								
Melbourne	1,579	3,788	1,818	1,001	1,740	1,146	1,280	1,331
Geelong	1,451	28	1,732	43	510	3	833	1
Portland	244	3	121	..	24	..	..	..
Westernport	82	..	1,573	..	350	..	7,899	16
Other	..	..	1	..	..	1	..	5
Total Victoria	*3,355*	*3,819*	*5,245*	*1,043*	*2,623*	*1,150*	*10,012*	*1,353*
Queensland—								
Brisbane	944	676	1,813	127	3,190	19	89	41
Cairns	57	..	320	..	42	..	18	..
Gladstone	835	..	9,026	..	21	..	421	..
Mackay	68	..	841	..	47	..	115	..
Townsville	287	49	990	2	102	..	131	..
Other	58	..	18,332	1	31	..	539	1
Total Queensland	*2,249*	*725*	*31,322*	*130*	*3,433*	*19*	*1,313*	*42*
South Australia—								
Port Adelaide	525	454	744	197	714	21	206	25
Ardrossan	..	..	176	..	..	..	319	..
Port Lincoln	96	..	690	1	57	..	37	..
Port Pirie	39	..	550	..	280	..	236	..
Port Stanvac	1,435	..	16	..	436	..	411	..
Rapid Bay	..	..	..	..	..	..	3	..
Whyalla	109	..	1,703	..	1,252	..	3,151	..
Other	71	..	859	..	1	..	617	..
Total South Australia	*2,275*	*454*	*4,738*	*198*	*2,740*	*21*	*4,980*	*25*
Western Australia—								
Fremantle	2,522	419	5,226	88	1,222	7	1,813	34
Albany	261	..	613	..	1	..	60	..
Bunbury	242	..	871	39	..	..	49	..
Dampier	279	6	33,967	..	4	1	60	..
Geraldton	121	1	857	..	..	..	..	..
Kwinana	1,740	..	135	..	124	..	192	..
Port Hedland	83	3	36,078	..	12	..	4,611	..
Yampi	..	..	3,587	..	..	..	143	..
Other	435	..	13,110	38	20	..	471	1
Total Western Australia	*5,683*	*429*	*94,444*	*165*	*1,383*	*7*	*7,399*	*35*
Tasmania—								
Hobart	217	24	158	70	649	223	420	163
Burnie	101	..	144	2	248	347	392	174
Launceston	95	10	1,389	10	585	285	199	263
Port Latta	37	..	2,034	..	..	..	..	..
Other	34	..	584	6	184	737	111	786
Total Tasmania	*484*	*34*	*4,309*	*88*	*1,666*	*1,592*	*1,122*	*1,386*
Northern Territory—								
Darwin	219	16	280	..	90	34	..	6
Groote Island	2	..	1,188	..	22	15	229	1
Gove	631	1	2,937	..	26	36	2	22
Other	..	..	..	..	..	..	..	..
Total Northern Territory	*851*	*17*	*4,405*	..	*138*	*85*	*231*	*29*
Australia	**21,893**	**8,029**	**164,866**	**2,926**	**27,864**	**3,201**	**28,454**	**3,143**

Overseas cargo according to major trade areas and type of service

The following two tables show particulars of cargo loaded in Australia for discharge overseas, and cargo discharged in Australia from overseas, classified according to the major trade areas of the world, by type of shipping service (i.e. liner or tramp, bulkship and tanker).

CARGO LOADED IN AUSTRALIA FOR DISCHARGE OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE

('000)

	Liners(a)		*Tramps, bulkships, tankers*		*All vessels*	
Major trade areas	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*
North America and Hawaii—						
1972–73	700	209	4,097	11	4,797	220
1973–74	627	153	4,399	2	5,026	155
1974–75	718	144	5,547	2	6,265	146
South America—						
1972–73	35	13	787	4	821	17
1973–74	15	4	569	..	584	4
1974–75	35	29	838	16	873	45
Europe (including U.S.S.R.)—						
1972–73	1,296	771	19,560	20	20,856	791
1973–74	1,172	535	21,024	1	22,196	536
1974–75	1,119	505	34,268	65	35,387	570
Africa—						
1972–73	149	125	1,091	..	1,240	125
1973–74	122	151	1,057	15	1,179	166
1974–75	100	123	1,530	14	1,630	137
Asia—						
Eastern Asia—						
1972–73	1,431	540	98,471	20	99,902	560
1973–74	1,193	536	113,508	12	114,701	548
1974–75	1,011	453	111,095	147	112,106	600
Other Asia—						
1972–73	803	446	2,289	212	3,092	658
1973–74	785	466	3,505	143	4,290	609
1974–75	773	432	5,286	147	6,059	579
Total Asia—						
1972–73	*2,233*	*986*	*100,760*	*232*	*102,993*	*1,217*
1973–74	*1,978*	*1,002*	*117,013*	*155*	*118,991*	*1,157*
1974–75	*1,784*	*885*	*116,381*	*294*	*118,165*	*1,179*
Papua New Guinea, New Zealand and Pacific Islands—						
1972–73	562	1,097	1,062	80	1,624	1,177
1973–74	675	991	1,786	54	2,461	1,045
1974–75	887	819	1,647	25	2,534	844
Indian Ocean Islands and Antarctic Area—						
1972–73	..	..	30	8	30	8
1973–74	..	..	34	8	34	8
1974–75	..	..	12	5	12	5
Total loaded						
1972–73	**4,976**	**3,200**	**127,387**	**355**	**132,362**	**3,555**
1973–74	**4,588**	**2,835**	**145,883**	**236**	**150,471**	**3,071**
1974–75	**4,643**	**2,503**	**160,223**	**424**	**164,866**	**2,927**

(*a*) Cargo and passenger liners.

CARGO DISCHARGED IN AUSTRALIA FROM OVERSEAS: MAJOR TRADE AREAS BY TYPE OF SERVICE

('000)

Major trade areas	*Liners(a)*		*Tramps, bulkships, tankers*		*All vessels*	
	Tonnes	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*
North America and Hawaii—						
1972–73	373	709	1,619	417	1,992	1,126
1973–74	605	1,031	1,903	465	2,508	1,496
1974–75	617	949	1,888	433	2,505	1,382
South America—						
1972–73	6	1	12	..	18	1
1973–74	4	6	10	3	14	9
1974–75	6	10	14	4	20	14
Europe (including U.S.S.R.)—						
1972–73	605	1,813	355	66	959	1,879
1973–74	820	1,910	466	226	1,286	2,136
1974–75	666	2,211	660	415	1,326	2,626
Africa—						
1972–73	102	56	104	..	206	56
1973–74	101	89	97	4	198	93
1974–75	57	67	147	4	204	71
Asia—						
Eastern Asia—						
1972–73	497	1,507	1,782	388	2,279	1,895
1973–74	404	1,865	2,410	742	2,814	2,607
1974–75	383	1,611	2,440	1,338	2,823	2,949
Other Asia—						
1972–73	161	504	11,954	76	12,115	580
1973–74	215	598	12,712	122	12,927	720
1974–75	189	446	11,894	124	12,083	570
Total Asia—						
1972–73	*658*	*2,011*	*13,736*	*464*	*14,394*	*2,475*
1973–74	*619*	*2,463*	*15,122*	*864*	*15,741*	*3,327*
1974–75	*572*	*2,057*	*14,334*	*1,462*	*14,906*	*3,519*
Papua New Guinea, New Zealand and Pacific Islands—						
1972–73	228	499	1,641	47	1,869	546
1973–74	245	513	2,084	67	2,329	580
1974–75	300	385	1,640	20	1,940	405
Indian Ocean Islands and Antarctic Area—						
1972–73	..	..	728	1	728	1
1973–74	..	..	979	2	979	2
1974–75	12	..	990	2	1,002	2
Total discharged						
1972–73	**1,972**	**5,090**	**18,195**	**994**	**20,167**	**6,084**
1973–74	**2,394**	**6,012**	**20,661**	**1,629**	**23,055**	**7,641**
1974–75	**2,230**	**5,679**	**19,673**	**2,340**	**21,903**	**8,019**

(*a*) Cargo and passenger liners.

Overseas cargo according to country of registration of vessels

The following table shows the total overseas cargo, discharged and loaded combined, according to the country in which the vessels were registered.

OVERSEAS CARGO DISCHARGED AND LOADED, BY COUNTRY OF REGISTRATION OF VESSELS: AUSTRALIA
('000)

	1972–73		*1973–74*		*1974–75*	
Country of registration of vessels	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*	*Tonnes*	*Cubic metres*
Australia	605	505	387	578	367	503
Denmark	2,103	189	1,891	187	2,382	221
France	1,118	142	266	60	158	151
Germany, Federal Republic of	4,070	588	4,644	686	5,465	619
Greece	7,299	171	12,145	193	9,780	132
Hong Kong	635	124	393	108	618	41
India	1,370	72	3,478	92	3,590	74
Italy	1,423	66	2,023	174	1,799	188
Japan	59,719	1,013	59,873	1,351	64,576	1,830
Liberia	19,714	223	25,057	399	28,018	288
Netherlands	2,330	357	2,399	574	2,410	430
New Zealand	502	973	613	1,047	644	629
Norway	16,284	498	20,604	486	18,399	538
Panama	1,912	54	3,968	64	6,021	245
Sweden	2,573	541	3,279	495	3,121	465
United Kingdom	22,479	3,028	21,518	2,884	23,845	2,995
United States of America	161	237	370	370	1,006	378
Other	8,232	858	10,618	965	14,570	1,218
Grand total	**152,529**	**9,639**	**173,526**	**10,713**	**186,769**	**10,945**

World shipping tonnage

At 1 July 1975 the total number of steamships and motorships 100 gross tons and upwards throughout the world was 63,724 with a gross tonnage of 342,162,363. Of those totals, steamships numbered 5,957 for 126,183,796 gross tons, and motorships 57,767 for 215,978,567 gross tons. This includes 7,024 oil tankers of 100 gross tons and upwards with a gross tonnage of 150,057,269. Australian steamships and motorships, 419 for 1,205,248 gross tons constituted 0.66 per cent and 0.35 per cent respectively of the total number and gross tonnage. This information has been derived from *Lloyd's Register of Shipping*.

Vessels registered in Australia

The following table shows the number and gross tonnage of trading vessels of 200 tons and over registered in Australia at 31 December 1975, classified according to: (i) year of construction; (ii) type of trade in which the vessels were engaged; and (iii) vessels built in Australian or in overseas shipyards.

AUSTRALIAN-REGISTERED TRADING VESSELS, 31 DECEMBER 1975(*a*)
(*Source:* Department of Transport)

	Overseas and interstate vessels		*Intrastate vessels*		*Built in Australian yards*		*Built overseas*		*Total*	
Year of construction	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*	*No.*	*Gross tons*
1971 and earlier	65	719,191	15	51,831	54	569,871	26	201,151	80	771,022
1972	4	56,682	1	48,947	4	82,143	1	23,486	5	105,629
1973	5	31,320	1	15,470	6	46,790	..	..	6	46,790
1974	4	91,397	1	15,939	4	101,394	1	5,942	5	107,336
1975	3	30,357	..	..	1	4,174	2	26,183	3	30,357
Total registered in Australia	**81**	**928,947**	**18**	**132,187**	**69**	**804,372**	**30**	**256,762**	**99**	**1,061,134**

(*a*) 200 gross tons and over.

Miscellaneous

Shipping freight rates

List of shipping freight rates for selected commodities are shown in *Overseas and Coastal Shipping* (14.10)

Shipping casualties

Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast are shown in the table below.

SHIPPING CASUALTIES TO OVERSEAS AND INTERSTATE STEAM AND MOTOR VESSELS(*a*) AUSTRALIA

	Shipping losses			*Other shipping casualties*			*Total shipping casualties*		
Year	*Vessels*	*Net tons*	*Lives lost*	*Vessels*	*Net tons*	*Lives lost*	*Vessels*	*Net tons*	*Lives lost*
1970–71	..	..	..	79	451,196	2	79	451,196	2
1971–72	..	..	..	91	499,195	2	91	499,195	2
1972–73	..	..	..	61	345,102	..	61	345,102	..
1973–74	5	447	3	78	647,157	2	83	647,604	5
1974–75	5	17,470	1	78	1,290,626	7	83	1,308,096	8

(*a*) Vessels over 50 net tons.

RAILWAYS

Government railways

Government railways in Australia operate in all States and Territories and provide an important means of transportation. In 1974–75 a total of 103.5 million tonnes of freight were carried, an increase of 117.9 per cent over the 47.5 million tonnes carried in 1955–56. However, in the same twenty-year period the number of passengers carried (mostly within the suburban areas of Sydney and Melbourne) declined by 34.0 per cent from 515 million in 1955–56 to 340 millions in 1974–75 (excluding Perth metropolitan passenger journeys). The number of train-kilometres run during 1974–75 (151 million) was a decrease of 2.7 per cent since 1955–56, (155 million) which is an indication of the trend towards heavier train loads with the more powerful motive power now available. Since the introduction of the first mainline diesel-electric locomotives in 1950 their numbers have increased greatly until at 30 June 1975 there were 1,455 throughout Australia. Diesel-electric locomotives during 1974–75 hauled 97 million train-kilometres, while steam locomotives hauled only 40 thousand train-kilometres.

Railway development

The first steam-operated railway in Australia ran between Melbourne and Port Melbourne, a distance of three kilometres, and was opened on 12 September 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway. Within a short time privately-owned railways opened in other States, but owing to the small volume of traffic available they were soon in financial difficulties and all were taken over by the respective State Governments. Under the policy of Government ownership and control the railway networks expanded until at 30 June 1941 there were 43,829 route-kilometres open for traffic in Australia. This was the greatest length ever recorded. Since the 1939–45

War many uneconomic branch lines have been closed. From 1 July 1948 to 30 June 1975, 6,507 kilometres have been closed, the greatest lengths being in Western Australia (2,291 kilometres), Queensland (1,561 kilometres), and Victoria (1,003 kilometres). During this same period 3,271 kilometres of new railway were added to the networks. The following table sets out the route-kilometres of government railways in each State and Territory at various dates since 1855.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, 1855 TO 1975

(Kilometres)

30 June—	*N.S.W.*	*Vic.*	*Qld.*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1855(*a*)	23	3	..	11	..	..	..	..	37
1861(*a*)	117	183	..	90	..	..	..	..	390
1871(*a*)	576	444	351	214	..	72	..	..	1,657
1881(*a*)	1,603	2,007	1,287	1,339	148	72	..	..	6,456
1891	3,512	4,447	3,533	2,681	319	565	233	..	15,290
1901	4,580	5,209	4,508	2,794	2,181	735	233	..	20,240
1911	6,054	5,670	6,225	3,114	3,824	756	233	..	25,876
1921	8,116	6,867	9,257	5,485	6,425	1,014	320	8	37,492
1931	10,054	7,265	10,507	5,995	7,458	1,070	510	8	42,867
1941	10,248	7,271	10,569	6,130	7,781	1,033	789	8	43,829
1951	10,226	7,154	10,557	6,124	7,535	987	789	8	43,380
1961	10,144	6,518	10,177	6,173	7,366	832	789	8	42,007
1971	10,129	6,376	9,329	5,927	6,906	805	789	8	40,269
1972	10,129	6,357	9,560	5,829	6,846	805	789	8	40,323
1973	10,129	6,357	9,560	5,904	6,897	830	789	8	40,474
1974	10,130	6,329	9,472	5,905	6,922	851	789	8	40,406
1975	10,131	6,331	9,780	5,909	6,805	851	789	8	40,604

(*a*) At 31 December.

One feature of the Australian government railways is the variety of gauges to which they are built. There are three principal gauges, 'broad' (1,600 mm), 'standard' (1,435 mm), and 'narrow' (1,067 mm). Extensive route-kilometres of 1,067 mm gauge railway were built in areas where traffic volumes were initially known to be small and where it was imperative to minimise the costs of construction. The following table shows the route-kilometres open in each State and Territory at 30 June 1975 according to gauge.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY GAUGE, 30 JUNE 1975

(Kilometres)

Gauge	*N.S.W.*	*Vic.*	*Qld.*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1600 mm	(*a*)328	(*b*)5,992	..	2,531	..	..	..	..	8,851
1435 mm	(*c*)9,803	325	111	(*d*)1,824	(*e*)2,092	..	..	(*f*)8	14,163
1067 mm	..	..	9,621	(*g*)1,554	(*h*)4,713	851	(*i*)789	..	17,528
762 mm	..	14	..	..	..	..	..	..	14
610 mm	..	..	48	..	..	..	..	..	48
Total	**10,131**	**6,331**	**9,780**	**5,909**	**6,805**	**851**	**789**	**8**	**40,604**
Per 1,000 of population	2.12	1.72	4.90	4.79	6.06	2.10	9.01	0.04	3.01
Per 1,000 square kilometre	12.64	27.82	5.66	6.01	2.69	12.55	0.59	3.29	5.29

(*a*) Portion of Victorian Railway System. (*b*) Excludes 325 route-kilometres of 1600 mm gauge which almost parallels the 1435 mm gauge line between Melbourne and Murray River. (*c*) Includes 47 route-kilometres of 1435 mm gauge line from Broken Hill to Cockburn owned and operated by the South Australian Government Railways. (*d*) Comprises 1128 kilometres of the Trans-Australian and 349 kilometres of the Central Australia Railway systems and 347 kilometres from Port Pirie to Cockburn. (*e*) Includes 730 kilometres of the Trans-Australian Railway system. (*f*) Australian Capital Territory Railway system. (*g*) Includes 591 kilometres of the Central Australia Railway system. (*h*) Excludes 127 kilometres of 1067 mm/1435 mm dual gauge line which are included in the 1435 mm gauge line. (*i*) Comprises 278 kilometres of the Central Australia and 511 kilometres of the North Australia Railway systems.

Government railway systems

Prior to 1 July 1975 there were six separate State Government railway systems and the Commonwealth Railways system. On 1 July 1975 the Tasmanian railways and the non-metropolitan South Australian railways were transferred to the Australian Government. As the former Commonwealth Railways included routes in South Australia and Western Australia, and the Victorian system extended into New South Wales, the system route-kilometres shown in the following table do not represent route-kilometres within each State and Territory. These are shown in the previous table. The route-kilometres of each system open for traffic, according to gauge, at 30 June 1975 is shown in the following table.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY GAUGE AND SYSTEM
30 JUNE 1975
(Kilometres)

	Gauge					
System	*1600 mm*	*1435 mm*	*1067 mm*	*762 mm*	*610 mm*	*Total*
New South Wales	..	(*a*)9,756	..	..	..	9,756
Victoria	(*b*)6,320	325	..	14	..	6,659
Queensland	..	111	9,621	..	48	9,780
South Australia	2,531	394	963	..	..	3,888
Western Australia	..	1,362	(*c*)4,713	..	..	6,075
Tasmania	..	..	851	..	..	851
Commonwealth	..	2,215	1,380	..	..	3,595
Australia	**8,851**	**14,163**	**17,528**	**14**	**48**	**40,604**

(*a*) Includes 446 route-kilometres which are electrified. (*b*) Excludes 325 route-kilometres of 1600 mm gauge line which almost parallels the 1435 mm gauge line between Melbourne and Murray River. Includes 421 route-kilometres which are electrified. (*c*) Excludes 127 kilometres of 1067 mm/1435 mm dual gauge line which are included in the 1435 mm gauge line.

The New South Wales system is based on Sydney and extends throughout the State. The Victorian system based on Melbourne radiates throughout the State, extending into areas of southern New South Wales. The Queensland system extends along the coast from Brisbane to Cairns in the north, while branch lines extend inland from Brisbane and the larger coastal cities of Rockhampton and Townsville. The Government railway system in Western Australia is concentrated in the south-western section of the State, and extends north to Meekatharra and east to Kalgoorlie and Esperance. Most of the railways in South Australia are located in the south-east of the State, but an isolated narrow gauge system operates in the Eyre Peninsula area. In Tasmania the main line connects Hobart and Launceston, and there are branch lines along the northern coast.

The former Commonwealth Railways comprised four separate railways. The Trans-Australian Railway, extending from Port Pirie to Kalgoorlie, is of standard gauge, as is that part of the Central Australia Railway from Port Augusta (Sterling North) to Marree. The extension of this railway from Marree to Alice Springs is of narrow gauge, as is the North Australia Railway from Darwin to Birdum. The Australian Capital Territory Railway from Queanbeyan to Canberra is of standard gauge. In this chapter particulars of the four former Commonwealth railways are combined; however, particulars for each railway are shown separately in the annual bulletin *Rail, Bus and Air Transport* (14.21).

Transfer of State Railways to the Commonwealth Government

Commonwealth and State Government legislation was enacted in 1975 for the transfer to the Commonwealth Government of the Tasmanian Government Railways and the non-metropolitan South Australian Railways. Both transfers took effect from 1 July 1975. The Australian National Railways Commission came into existence on this date to control the two transferred systems and the former Commonwealth Railways.

Standardisation of railway gauges

Information about standardisation of railway gauges, completion and commencement dates of services and centres linked are given in Year Book No. 58, 1972, page 348.

GOVERNMENT RAILWAYS 1967-68 TO 1974-75
FREIGHT TRAFFIC

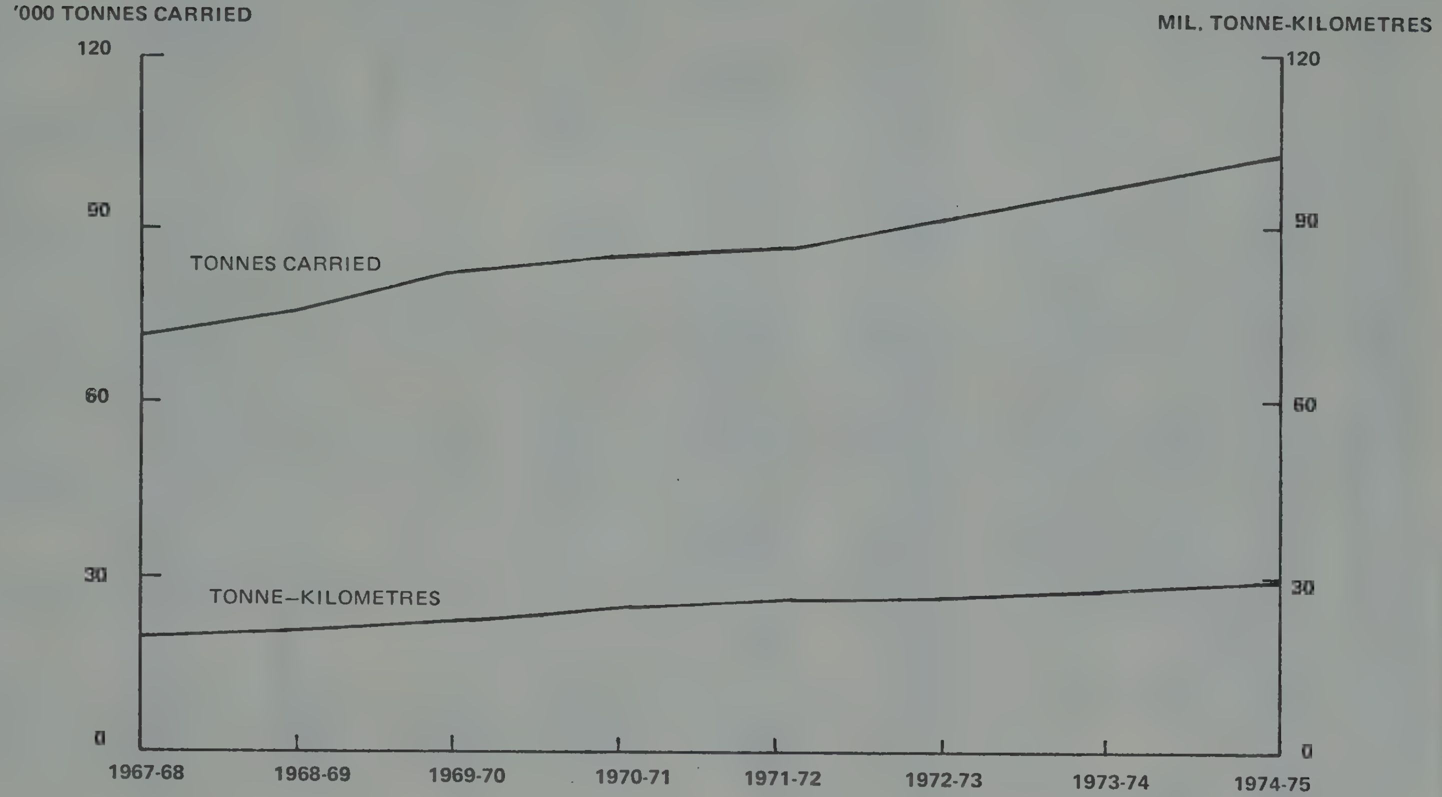


PLATE 37

Developments in standardisation

The Commonwealth Government has enacted legislation for the construction of a standard gauge connection between Adelaide and the Trans-Australian Railway at Crystal Brook, and work on this project has commenced. When this link is completed all mainland State capital cities will be connected to the standard gauge network.

The Commonwealth Government has also enacted legislation for the construction of a new standard gauge railway between Tarcoola, on the Trans-Australian Railway, and Alice Springs. Construction of this line is proceeding. It will replace the existing narrow gauge railway between Marree and Alice Springs.

The West Australian Government has converted to standard gauge the existing narrow gauge railway lines between Kalgoorlie and Esperance, and between Kalgoorlie and Leonora.

Operations of Government railway systems

Particulars of train-kilometres, passenger journeys, passenger-kilometres, freight-tonnes carried, and freight tonne-kilometres included in this section refer only to operations for which revenue is received.

Summary of operations

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, SYSTEMS, 1974–75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Train-kilometres ('000)(*a*)—								
Suburban passenger	16,115	14,291	3,323	3,412	2,287	96	..	39,524
Country passenger .	13,673	7,815	4,076	1,991	1,486	302	1,518	30,860
Goods(*b*) . .	25,873	11,769	22,715	4,786	9,093	1,584	4,418	80,239
Total . . .	**55,661**	**33,876**	**30,114**	**10,189**	**12,866**	**1,983**	**5,936**	**150,624**
Passenger journeys ('000)(*c*)—								
Suburban . .	167,868	112,757	34,821	11,997	n.a.	273	..	n.a.
Country(*d*) . .	3,976	4,963	1,811	700	394	156	239	12,239
Total . . .	**171,844**	**117,720**	**36,632**	**12,697**	**n.a.**	**428**	**(*e*)239**	**n.a.**
Passenger-kilometres ('000)(*f*)—								
Suburban . .	n.a.	1,698,614	n.a.	158,962	n.a.	2,709	..	n.a.
Country . .	n.a.	701,798	n.a.	173,523	141,071	17,518	237,672	n.a.
Total . . .	**n.a.**	**2,400,412**	**n.a.**	**332,485**	**n.a.**	**20,227**	**237,672**	**n.a.**
Freight—								
Tonnes carried ('000)(*d*)	33,476	11,057	30,208	6,738	16,153	1,731	4,102	103,465
Net tonne-kilometres (million)(*g*) . .	8,782.3	3,091.4	9,118.0	1,756.9	4,262.4	273.3	2,507.4	29,791.7

(*a*) One train (i.e. a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one kilometre for revenue purposes. (*b*) Includes mixed train-kilometres. (*c*) Based on ticket sales making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (*d*) Inter-system traffic is included in the total for each system over which it passes. (*e*) Passenger journeys continuing over both the Trans-Australian and Central Australia Railway Systems are counted twice. In 1974–75 these numbered 8,168. (*f*) One passenger travelling one kilometre. (*g*) One tonne carried one kilometre.

Rolling stock

GOVERNMENT RAILWAYS: ROLLING STOCK INCLUDED IN CAPITAL ACCOUNT

(Number)

System and date	*Locomotives* Steam	Diesel-electric	Electric	Other(a)	Total	Coaching stock(b)	Goods stock	Service stock
30 June 1975—								
New South Wales	..	421	40	85	546	2,876	16,941	1,961
Victoria	19	265	36	81	401	2,380	18,056	1,612
Queensland	..	404	..	85	489	1,170	20,530	2,232
South Australia	4	151	..	..	155	394	7,116	589
Western Australia	2	186	..	23	211	404	11,206	567
Tasmania	12	48	..	21	81	116	2,178	169
Commonwealth	..	98	..	..	98	58	2,753	517
Australia	**37**	**1,573**	**76**	**295**	**1,981**	**(c)7,624**	**(c)78,810**	**(c)7,614**
30 June—								
1974	78	1,563	76	294	2,011	7,870	79,086	7,723
1973	87	1,539	76	291	1,993	7,982	79,913	7,800
1972	168	1,489	76	267	2,000	8,178	81,135	8,033
1971	200	1,447	76	256	1,979	8,183	82,279	8,141

(a) Includes non-passenger-carrying diesel power vans. (b) Includes all brake vans and non-powered electric train stock. (c) Includes jointly-owned stock.

Train-kilometres

Train-kilometres by type of service and motive power

GOVERNMENT RAILWAYS: TRAIN-KILOMETRES 1974–75

('000 kilometres)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
Type of service—								
Passenger—suburban	16,115	14,291	3,323	3,412	2,287	96	..	39,524
Passenger—country	13,673	7,815	4,076	1,991	1,486	302	1,518	30,861
Goods(a)	25,873	11,769	22,715	4,786	9,093	1,584	4,418	80,239
Total	**55,661**	**33,876**	**30,114**	**10,189**	**12,866**	**1,983**	**5,936**	**150,624**
Type of motive power—								
Hauled by diesel-electric locomotives	30,549	15,663	27,172	5,850	10,074	1,853	5,772	96,933
Hauled by steam locomotives	5	20	4	6	2	4	..	40
Hauled by electric and other locomotives	3,246	1,531	546	..	..	1	..	5,323
Powered coaching stock	21,861	16,663	2,391	4,332	2,790	125	164	48,328
Total	**55,661**	**33,876**	**30,114**	**10,189**	**12,866**	**1,983**	**5,936**	**150,624**

(a) Includes mixed train-kilometres.

Total train-kilometres

TRAIN-KILOMETRES

('000 kilometres)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
1970–71	63,633	33,524	27,951	10,210	12,785	1,764	6,453	156,320
1971–72	61,176	33,175	29,165	10,018	12,410	1,767	6,013	153,724
1972–73	59,941	33,058	29,523	10,024	11,669	1,960	5,859	152,035
1973–74	58,255	33,345	28,542	10,313	12,617	2,154	5,966	151,192
1974–75	55,661	33,876	30,114	10,189	12,866	1,983	5,936	150,624

Passenger traffic

Passenger journeys

GOVERNMENT RAILWAYS: PASSENGER JOURNEYS(*a*), SYSTEMS
('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
SUBURBAN								
1970–71	238,800	138,131	27,621	13,393	10,557	636	..	429,139
1971–72	(*b*)196,097	133,840	30,184	12,918	10,800	597	..	384,436
1972–73	194,140	108,970	30,500	12,756	11,143	559	..	358,068
1973–74	192,228	110,141	32,003	12,914	11,332	514	..	359,132
1974–75	167,868	112,757	34,821	11,997	n.a.	273	..	n.a.
COUNTRY(*c*)								
1970–71	15,987	4,080	1,915	553	362	235	259	23,391
1971–72	(*b*)12,403	3,954	1,762	515	350	189	207	19,380
1972–73	11,985	4,180	1,645	564	376	193	222	19,165
1973–74	6,716	4,507	1,720	683	416	179	263	14,485
1974–75	3,977	4,963	1,811	700	394	156	239	12,239
TOTAL(*c*)								
1970–71	254,787	142,211	29,536	13,946	10,919	871	259	452,530
1971–72	(*b*)208,500	137,794	31,946	13,433	11,150	785	207	403,816
1972–73	206,125	113,150	32,145	13,320	11,518	752	222	377,233
1973–74	198,944	114,648	33,723	13,597	11,748	693	263	373,618
1974–75	171,844	117,720	36,632	12,697	n.a.	429	239	n.a.

(*a*) Based on ticket sales making allowance for periodical tickets. Tickets sold at concession rates are counted as full journeys. (*b*) Figures for earlier years include unremunerative journeys. (*c*) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes.

Passenger-kilometres

GOVERNMENT RAILWAYS: PASSENGER-KILOMETRES(*a*), SYSTEMS
('000)

Year	*Vic.*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*
SUBURBAN					
1970–71	2,068,414	170,674	n.a.	7,279	..
1971–72	1,941,497	161,979	n.a.	6,653	..
1972–73	1,973,886	172,444	n.a.	6,609	..
1973–74	1,704,902	164,020	n.a.	5,161	..
1974–75	1,698,614	158,962	n.a.	2,709	..
COUNTRY					
1970–71	611,301	147,545	124,193	19,747	227,577
1971–72	534,946	131,084	115,910	16,412	207,409
1972–73	561,273	139,726	126,387	17,728	209,527
1973–74	651,933	173,146	149,084	18,177	262,891
1974–75	701,798	173,523	141,072	17,518	237,672
TOTAL					
1970–71	2,679,715	318,219	n.a.	27,026	227,577
1971–72	2,476,441	293,063	n.a.	23,065	207,409
1972–73	2,535,160	312,170	n.a.	24,337	209,527
1973–74	2,356,835	337,166	n.a.	23,338	262,891
1974–75	2,400,412	332,485	n.a.	20,227	237,672

(*a*) Particulars for New South Wales, Queensland and the suburban system in Western Australia are not available and as a consequence, no totals for Australia are available.

Freight traffic

Freight carried

GOVERNMENT RAILWAYS: FREIGHT CARRIED(*a*), SYSTEMS

('000 tonnes)

Commodity and year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
1974–75—								
Wheat	3,100	2,021	612	1,008	3,295	..	..	10,036
Other agricultural produce	1,369	890	3,037	526	490	14	21	6,347
Coal, coke and briquettes	15,846	986	19,831	10	808	96	1,803	39,380
Other minerals(*b*)	3,530	334	2,455	1,924	8,290	60	461	17,054
Wool	113	129	36	32	137	3	4	454
Fertilisers and manure	236	470	178	289	501	67	4	1,745
Cement	844	852	228	64	125	258	117	2,488
Timber	176	242	112	81	293	345	38	1,287
Livestock	166	255	580	160	67	3	81	1,312
All other commodities	8,096	4,878	3,139	2,644	2,147	885	1,573	23,362
Total	**33,476**	**11,057**	**30,208**	**6,738**	**16,153**	**1,731**	**4,102**	**103,465**
1973–74	32,651	11,370	25,401	6,607	14,839	1,828	4,270	96,966
1972–73	31,044	11,475	24,666	5,781	13,706	1,554	4,255	92,481
1971–72	32,310	11,795	19,267	6,014	13,867	1,299	4,119	88,671
1970–71	33,737	12,690	15,665	6,086	13,457	1,220	4,452	87,307

(*a*) Inter-system traffic is included in the total for each system (including each Commonwealth railway) over which it passes. (*b*) Includes sand and gravel.

Freight net tonne-kilometres

GOVERNMENT RAILWAYS: FREIGHT NET TONNE-KILOMETRES, SYSTEMS

(Million)

Commodity and year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
1974–75—								
Wheat	1,362.1	634.9	(*a*)	161.1	910.1	..	0.1	(*a*)
Other agricultural produce	743.4	263.9	(*a*)	84.7	134.5	2.8	18.7	(*a*)
Coal, coke and briquettes	1,245.4	178.0	(*a*)	4.0	117.4	19.5	459.5	(a)
Other minerals(*b*)	710.1	96.6	(*a*)	418.5	1,676.1	12.0	134.5	(a)
Wool	50.7	30.7	(*a*)	8.7	57.3	0.7	4.6	(a)
Fertilisers and manure	136.0	124.3	(*a*)	84.8	165.4	19.4	6.9	(a)
Cement	232.5	101.5	(*a*)	22.8	46.3	1.8	24.1	(a)
Timber	129.8	77.0	(*a*)	26.0	95.0	32.8	55.4	(a)
Livestock	88.3	74.3	286.4	34.5	19.3	0.8	40.1	543.7
All other commodities	4,084.0	1,510.6	8,831.6	911.8	1,041.0	183.5	1,762.4	18,324.9
Total	**8,782.3**	**3,091.4**	**9,118.0**	**1,756.9**	**4,262.4**	**273.3**	**2,507.4**	**29,791.7**
1973–74	8,642.5	3,126.2	7,855.1	1,753.1	4,142.5	277.9	2,532.0	28,329.3
1972–73	8,117.6	3,164.8	7,613.1	1,588.4	3,686.2	210.6	2,201.1	26,581.7
1971–72	8,615.2	3,264.2	6,315.1	1,583.0	3,447.8	169.7	2,007.9	25,402.9
1970–71	9,055.9	3,464.5	5,423.0	1,613.8	3,397.9	154.0	2,096.5	25,205.6

(*a*) Not available separately, included with 'All other commodities'. (*b*) Includes sand and gravel.

Finance

GOVERNMENT RAILWAYS: GROSS EARNINGS(*a*), SYSTEMS, 1974–75
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Coaching—								
Suburban passenger	52,135	28,371	4,401	2,736	..	38	..	87,681
Country passenger	16,055	11,836	4,688	2,902	3,076	193	5,270	44,020
Other	9,976	5,729	2,561	1,274	2,111	334	654	22,639
Total coaching	*78,166*	*45,936*	*11,650*	*6,912*	*5,187*	*565*	*5,924*	*154,340*
Freight (goods and livestock)—								
Wheat	(*c*)	13,979	4,818	5,596	21,999	..	1	n.a.
Other agricultural produce	(*c*)	5,961	15,322	2,681	3,490	107	229	n.a.
Coal, coke and briquettes	(*c*)	4,211	73,618	65	3,911	381	2,603	n.a.
Other minerals(*d*)	(*c*)	1,691	16,035	8,324	20,456	205	1,742	n.a.
Wool	(*c*)	1,283	1,058	186	2,807	31	62	n.a.
Fertilisers and manure	(*c*)	2,235	1,968	1,125	3,100	554	59	n.a.
Cement	(*c*)	3,677	2,579	393	1,081	975	407	n.a.
Timber	(*c*)	2,109	1,370	438	2,747	984	426	n.a.
Livestock	(*c*)	1,631	7,848	1,284	609	50	690	n.a.
All other commodities	(*c*)	35,138	40,612	15,423	26,436	4,153	26,212	n.a.
Total freight	*(b)192,947*	*71,915*	*165,228*	*35,515*	*86,636*	*7,440*	*32,431*	*592,112*
Miscellaneous	*(b)20,260*	*12,091*	*6,809*	*5,524*	*15,021*	*260*	*3,012*	*62,977*
Grand total	**(*b*)291,373**	**129,942**	**183,687**	**47.950**	**106,844**	**8,266**	**41,367**	**809,429**

(*a*) Excludes Government grants. (*b*) Includes State Co-ordination Tax Contribution. (*c*) Not available separately (*d*) Includes sand and gravel.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS, 1974–75
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(a)*	*Cwlth*	*Aust.*
Maintenance of way and works	61,656	45,517	62,896	(*a*)18,248	(*a*)22,437	5,111	11,265	227,130
Motive power(*b*)	131,788	61,234	81,736	(*a*)25,291	(*a*)38,664	6,662	16,308	361,683
Traffic	113,675	79,671	64,658	(*a*)24,430	29,793	5,488	12,521	330,236
Other charges	108,115	56,971	18,634	12,497	12,802	2,713	15,752	227,484
Total	**415,234**	**243,393**	**227,925**	**(*a*)80,466**	**(*a*)103,696**	**19,973**	**(*a*)55,847**	**1,146,534**

(*a*) Includes provision of reserves for depreciation. (*b*) Includes maintenance of rolling stock.

GOVERNMENT RAILWAYS: GROSS EARNINGS, WORKING EXPENSES, AND NET EARNINGS, SYSTEMS

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
GROSS EARNINGS								
1970–71	251,899	108,646	110,165	34,399	60,671	5,805	28,979	600,564
1971–72	266,268	112,685	124,782	35,386	63,634	6,123	29,208	638,086
1972–73	254,070	111,833	137,745	35,085	63,600	6,835	31,241	640,408
1973–74	262,691	115,613	149,844	39,531	78,480	7,674	37,217	691,050
1974–75	291,373	129,942	183,687	47,950	106,844	8,266	41,367	809,429
WORKING EXPENSES								
				(*a*)	(*a*)	(*a*)	(*a*)	
1970–71	242,842	129,054	105,155	42,714	59,652	9,891	29,382	618,690
1971–72	263,484	138,722	119,743	46,521	63,748	10,391	31,540	674,149
1972–73	298,180	156,120	133,384	52,320	68,223	11,829	34,487	754,543
1973–74	349,897	188,599	162,101	60,747	81,916	15,598	44,423	903,281
1974–75	415,234	243,393	227,925	80,466	103,696	19,973	55,847	1,146,534
NET EARNINGS(*b*)								
1970–71	9,057	—20,408	5,010	—8,315	1,019	—4,086	—403	—18,126
1971–72	2,784	—26,036	5,038	—11,135	—115	—4,267	—2,333	—36,063
1972–73	—44,111	—44,287	4,361	—17,236	—4,622	—4,994	—3,247	—114,135
1973–74	—87,206	—72,986	—12,257	—21,216	—3,436	—7,924	—7,206	—212,231
1974–75	—123,861	—113,451	—44,238	—32,516	3,148	—11,707	—14,479	—337,104

(*a*) Includes provision of reserves for depreciation. (*b*) Excess of gross earnings over working expenses as shown in this table.

GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT, SYSTEMS, 30 JUNE 1975

($'000)

		Plus *grants and other earnings payable to railways*				**Less** *other expenses charged to railways*					
System	*Net earnings —excess of gross earnings over working expenses*	*State Government grants*	*Road motor earnings*	*Other*	*Total*	*Interest and exchange*	*Sinking fund*	*Road motor expenses (a)*	*Other*	*Total*	*Surplus (+) or deficit (−)*
New South Wales	−123,861	(*b*)4,686	..	..	4,686	37,934	8,029	..	(*c*)1,801	47,764	−166,939
Victoria	−113,451	(*d*)56	89	..	146	12,098	497	386	..	12,981	−126,286
Queensland	− 44,238	..	..	..	..	43,435	..	..	(*e*)1,534	44,969	− 89,207
South Australia	− 32,516	(*f*)40,000	364	..	40,364	8,137	..	520	(*g*)949	9,606	− 1,758
Western Australia	3,148	..	1,465	..	1,465	13,544	..	2,711	(*h*)33	16,289	− 11,676
Tasmania	− 11,707	..	..	..	..	3,247	..	..	..	3,247	− 14,954
Commonwealth	− 14,479	..	..	..	..	..	..	..	..	..	− 14,479
Australia	**−337,104**	**44,742**	**1,919**	..	**46,661**	**118,395**	**8,526**	**3,617**	**4,317**	**134,856**	**−425,299**

(*a*) Includes interest and exchange. (*b*) Grants to meet losses on country developmental lines, and to subsidise payments due to superannuation account. (*c*) Loan management and loan flotation expenses. (*d*) Kerang–Koondrook tramway recoup from Treasury. (*e*) Demolished assets written off. (*f*) Grants towards deficiency. (*g*) Interest and repayment under Railway Standardisation and Railway Equipment Agreements. (*h*) Australian currency revaluation adjustment.

Employment, salaries and wages

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES (EXCLUDING CONSTRUCTION STAFF) AND SALARIES AND WAGES PAID(*a*), 1974–75

	N.S.W.	*Vic.(b)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Cwlth*	*Aust.*
Salaried staff	8,898	5,520	3,994	1,772	2,184	354	771	23,493
Wages staff	31,152	20,454	19,520	5,748	7,633	1,637	3,452	89,596
Total staff	**40,050**	**25,974**	**23,514**	**7.520**	**9,817**	**1,991**	**4,223**	**113,089**
Salaries and wages paid $'000	330,494	198,592	186,311	64,766	74,123	15,198	33,834	903,318

(*a*) Excludes salaries and wages paid to road motor staff. (*b*) Includes construction staff.

Private railways

Private railways are operated over a range of gauges and are to be found in each State of Australia. These systems service agricultural areas, mining ventures, industrial complexes and ports. A range of commodities are carried, including coal, iron ore, other minerals and manufactured products.

Details of location, ownership and operation of the major private railway systems were given in Year Book No. 56, 1970, page 364.

TRAM, BUS, AND FERRY SERVICES

Systems in operation

Tram and trolley-bus. At 30 June 1975 tram services were in operation in Melbourne, Victoria, and in Adelaide, South Australia. The last of the trolley-bus services ceased to operate in Australia with their replacement by buses in Perth, Western Australia, on 29 August 1969. Tram services ceased to operate in Ballarat on 19 September 1971 and in Bendigo on 16 April 1972.

In many parts of Australia private lines used for special purposes in connection with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways, and the traffic on them has nothing in common with that of the street tram used for the conveyance of passengers, which are dealt with in this section.

Bus. Services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal bus services located in all State capital cities; Canberra, Australian Capital Territory; Newcastle, New South Wales; Rockhampton, Queensland; Fremantle and the Eastern Goldfields area, Western Australia; Launceston and Burnie, Tasmania; Darwin, Northern Territory; and for country road services operated by the Western Australian Government Railways. Particulars of bus services under the control of private operators for the States of Victoria, Queensland, South Australia and Western Australia are given in the annual bulletin *Rail, Bus and Air Transport* (14.21).

Ferry. Ferry passenger services are operated in the following States: New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Mersey River at Devonport. Control is exercised by both government authorities and private operators. Particulars of the operations of these services are given in previous issues of this Year Book and in the annual bulletin *Rail, Bus and Air Transport*. In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

Government and municipal tram and bus services

Because of the development in recent years of the various forms of public road transport under the control of single authorities, and the gradual replacement of tram services by bus services, it is not possible to obtain separate statistics for all phases of the activities of each form of transport, particularly financial operations.

TRAM AND BUS SERVICES: GOVERNMENT AND MUNICIPAL STATES AND TERRITORIES, 1974–75

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Route-kilometres at 30 June—										
Tram(*a*)	kilometres	..	217	..	11	..	..	..	..	228
Bus	”	998	242	655	754	8,374	458	56	322	11,859
Vehicle-kilometres—										
Tram	’000	..	23,840	..	676	..	..	..	..	24,516
Bus	”	65,900	12,027	19,790	30,819	40,734	9,145	929	8,453	187,797
Rolling stock at 30 June—										
Tram	number	..	703	..	26	..	..	..	..	729
Bus		1,854	295	610	683	861	302	29	333	4,967
Passenger journeys—										
Tram	’000	..	111,077	..	1,252	..	..	..	..	112,329
Bus	”	192,906	22,658	50,759	57,046	59,386	20,589	n.a.	12,816	(*b*)416,160
Gross revenue(*c*)—										
Tram and bus	$’000	42,510	25,471	12,337	13,427	13,865	2,916	324	1,840	112,690
Working expenses(*d*)—										
Tram and bus	$’000	76,520	42,244	15,045	18,951	22,000	6,750	798	5,478	187,787
Net revenue—										
Tram and bus	$’000	−34,011	−16,774	−2,708	−5,524	−8,136	−3,834	−473	−3,638	−75,098
Employees at 30 June—										
Tram and bus	number	6,844	4,575	1,476	1,668	2,087	668	55	456	17,829
Accidents—										
Tram and bus(*e*)—										
Persons killed	number	6	7	..	..	1	..	..	..	14
Persons injured	”	n.a.	389	167	204	399	32	..	54	(*f*)1,245

(*a*) Gauge 1435 mm throughout. (*b*) Excludes Northern Territory. (*c*) Excludes government grants. (*d*) Includes provision of reserves for depreciation, etc., where possible. (*e*) Excludes accidents to employees. (*f*) Excludes New South Wales.

Minus sign (−) denotes deficit.

TRAM AND BUS SERVICES: GOVERNMENT AND MUNICIPAL AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Route-kilometres at 30 June—						
Tram	kilometres	262	225	228	227	228
Bus	”	10,609	10,495	10,890	11,780	11,859
Vehicle kilometres—						
Tram	’000	25,806	25,180	25,119	24,555	24,516
Bus	”	177,049	170,769	172,866	179,702	187,797
Rolling stock at 30 June—						
Tram	number	784	722	734	734	729
Bus	”	4,469	4,437	4,442	4,761	4,967
Passenger journeys—						
Tram	’000	112,974	104,558	106,333	110,791	112,329
Bus		447,646	398,421	410,139	417,513	(*a*)416,160
Gross revenue(*b*)—						
Tram and bus	$’000	82,510	91,015	95,171	105,149	112,690
Working expenses(*c*)—						
Tram and bus	$’000	96,507	103,274	117,598	146,655	187,787
Net revenue—						
Tram and bus	$’000	−13,997	−12,260	−22,426	−41,506	−75,098
Employees at 30 June—						
Tram and bus	number	17,776	17,545	17,256	17,549	17,829
Accidents—						
Tram and bus(*d*)—						
Persons killed	number	21	22	30	10	14
Persons injured	”	2,459	2,275	2,732	2,587	(*e*)1,245

(*a*) Excludes Northern Territory. (*b*) Excludes government grants. (*c*) Includes provision of reserve for depreciation, etc., where possible. (*d*) Excludes accidents to employees. (*e*) Excludes New South Wales.

Minus sign (—) denotes deficit.

JOURNEY TO WORK AND JOURNEY TO SCHOOL

In August 1974, a survey was conducted in conjunction with the quarterly population survey (*see* Chapter 20, Employment and Unemployment) in order to obtain information about the means by which persons travelled to work and students travelled to school, university or other type of educational institution, the time at which they usually left home, the time they usually spent on the journey and the cost of fares and parking fees (if any) incurred. The results of the survey were published in *Journey to Work and Journey to School*, August 1974 (17.5). The results of a similar survey conducted in May 1970 were published in *Journey to Work and Journey to School*, May 1970 (17.5).

MOTOR VEHICLES

The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia, since they are the function of a separate authority, or authorities, in each State and Territory. Particulars of registration, licences, fees payable, etc., in each State and Territory at 31 December 1975 are shown in *Motor Vehicle Registrations*, 1975 (14.1).

Tables in this section include vehicles owned by private individuals, local government authorities, State Governments, and the Australian Government (excluding those belonging to the defence services).

Survey of motor vehicle usage

A survey was conducted throughout Australia in late 1971 by the Australian Bureau of Statistics for the purpose of gathering information on the usage of motor vehicles. This survey was similar to one carried out in 1963. The owners of approximately 51,000 vehicles other than buses were approached for information relating to the usage of their vehicles over the twelve months ended 30 September 1971. In addition, usage details of 800 bus fleets were sampled and collected for the twelve months ended 30 June 1971. The framework, from which the sample was drawn, was obtained from the motor vehicle registration authorities in all States and Territories. The survey was based on respondents' recollections of their usage of the selected vehicles/fleets over their period of ownership during the survey year.

The main purpose of the survey was to determine the total distance travelled by vehicles, classified according to area and purpose of travel. Information was also obtained from the survey on: (i) tonne-kilometres; (ii) average load carried; (iii) vehicle usage (i.e. for hire and reward, ancillary or other); (iv) fuel consumption; (v) road surface; (vi) occupant-kilometres; (vii) driver characteristics.

The following table shows, for Australia, total annual kilometres travelled for the twelve months ended 30 September 1971 according to area and purpose of travel. The percentage standard errors (S.E. %) indicate the extent to which the estimates can vary by chance because only a sample and not the total vehicle population was enumerated. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors. For example, if an estimate of 3,000 million kilometres has a standard error of 5 per cent (i.e. 150 million kilometres), then there would be approximately two chances in three that a comparable complete collection would give a figure within the range of 2,850 million kilometres to 3,150 million kilometres, and about nineteen chances in twenty that the figure would be within the range of 2,700 million kilometres to 3,300 million kilometres.

TOTAL ANNUAL KILOMETRES TRAVELLED(*a*) BY PURPOSE AND AREA OF OPERATION, AUSTRALIA, TWELVE MONTHS ENDED 30 SEPTEMBER 1971

Area of operation	*Laden business*		*Unladen business*		*Total business(b)*		*Paid to and from work(c)*		*Unpaid to and from work*		*Private*		*Total*	
	million kilometres	*S.E. %*	*million kilometres*	*S.E. %*	*million kilometres*	*S.E. %*	*million kilometres*	*S.E. %*	*million kilometres*	*S.E. %*	*million kilometres*	*S.E. %*	*million kilometres*	*S.E. %*
Capital city and environs .	3,566.3	1.7	1,804.7	2.1	12,609.2	2.5	2,396.0	5.5	9,566.1	2.8	18,022.6	1.9	42,594.2	1.3
Provincial urban(*d*).	512.1	4.5	318.8	6.3	1,732.3	8.7	250.7	14.6	1,313.2	7.8	3,234.0	4.3	6,530.4	4.0
Other areas of State or Territory .	3,470.6	1.6	2,600.4	1.8	10,523.0	2.3	685.3	12.3	2,849.7	4.9	14,083.0	2.1	28,141.2	1.6
Other States and Territories(*e*) .	396.9	3.6	126.7	5.1	877.4	7.3	48.4	25.7	213.7	15.0	2,095.0	5.0	3,234.6	4.1
Total .	**7,945.8**	**1.0**	**4,850.4**	**1.3**	**25,742.1**	**1.7**	**3,380.4**	**5.0**	**13,942.7**	**2.3**	**37,435.1**	**1.2**	**80,501.2**	**0.8**

(*a*) Excludes kilometres travelled by buses. (*b*) Includes the total kilometres travelled of cars, station wagons and motor cycles for business purposes. The dissection of business travel into laden/unladen for these vehicles was not sought. (*c*) For the purpose of this survey 'Paid to and from work' travel is not considered to be business travel. (*d*) Includes centres (other than capital cities) having populations greater than 40,000 at the 1966 Census of Population and Housing. (*e*) Covers kilometres travelled by vehicles in all States other than that in which the vehicle was registered.

Motor vehicles on register

Details of motor vehicles on the register are compiled by up-dating motor vehicle census data from information made available by the various motor vehicle registration authorities in the States and Territories. Censuses of motor vehicles have been conducted in respect of 31 December 1955, 31 December 1962 and 30 September 1971. At these census dates considerably greater information concerning the particulars shown in the tables following is available. Final detailed results of the 1971 census have been published in separate census bulletins for each State and Territory and for Australia.

A revised classification of motor vehicles has been adopted for publication of statistics of motor vehicle registrations from 1 January 1972. The principal differences between this classification and that which it replaces involve the categories light commercial type vehicles, trucks and other truck type vehicles. Consequently, figures shown from January 1972 for these categories are not strictly comparable with data for previous periods.

MOTOR VEHICLES ON REGISTER, BY TYPE OF VEHICLE, 31 DECEMBER 1975

('000)

State or Territory	*Motor cars*	*Station wagons*	*Light commercial type vehicles*		*Trucks (carrying capacity 1 tonne and over)*		*Other truck type vehicles*	*Buses*	*Motor cycles*	*Total*
			open	*closed*	*rigid*	*articulated*				
New South Wales .	1,433.0	270.4	144.1	61.6	153.6	14.0	3.7	8.8	88.2	2,177.2
Victoria . .	1,194.9	233.0	104.1	61.8	97.1	12.4	5.3	7.1	49.4	1,765.1
Queensland . .	555.7	132.9	85.1	31.0	86.3	5.6	1.4	3.5	69.6	971.2
South Australia .	420.8	70.7	37.4	13.2	43.0	3.9	3.3	3.1	33.4	628.9
Western Australia .	350.4	73.5	49.6	24.4	58.0	3.2	3.1	3.1	28.7	593.8
Tasmania . .	136.6	21.6	14.5	5.6	13.1	1.2	0.1	1.5	7.7	201.9
Northern Territory.	20.5	8.1	6.5	2.3	8.6	0.6	0.1	0.4	5.8	52.9
Australian Capital Territory . .	76.7	13.7	5.2	3.3	4.5	0.3	0.1	0.7	6.2	110.7
Total . .	**4,188.5**	**823.8**	**446.5**	**203.1**	**464.2**	**41.2**	**17.1**	**28.3**	**289.1**	**6,501.7**

MOTOR VEHICLES ON REGISTER, BY TYPE OF VEHICLE
AUSTRALIA
('000)

31 December	*Motor cars and station wagons*	*Light commercial type vehicles, other truck type vehicles and buses*	*Motor cycles*	*Total vehicles*
1971	4,057.5	982.4	164.8	5,204.9
1972	4,259.8	1,020.5	193.4	5,474.0
1973	4,520.2	1,078.3	235.5	5,834.1
1974	4,770.6	1,131.3	274.5	6,176.5
1975	5,012.3	1,200.3	289.1	6,501.7

MOTOR VEHICLES(*a*) ON REGISTER PER 1,000 OF POPULATION
STATES AND TERRITORIES

31 December	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971	390.7	398.5	406.1	430.5	432.4	420.1	347.6	436.3	403.2
1972	403.3	411.4	426.4	448.0	449.2	433.8	359.7	471.8	418.1
1973	422.9	433.5	450.2	472.6	470.3	451.0	374.1	501.1	439.7
1974	439.3	452.4	466.3	485.2	485.3	468.2	619.3	534.6	458.0
1975	451.8	478.8	482.6	507.4	522.1	493.8	551.4	550.2	478.0

(*a*) Excludes tractors, plant and equipment.

Registrations of new motor vehicles

Particulars of registrations of new motor vehicles are shown by type, make, and horsepower of vehicle in monthly, quarterly and annual bulletins of Motor Vehicle Registrations.

In these statistics 'registrations' mean registrations processed by the motor vehicle registration authorities in the States and Territories during the period.

A revised classification of motor vehicles has been adopted for publication of statistics of new motor vehicle registrations from 1 January 1972. The principal differences between this classification and that which it replaces involve the categories light commercial type vehicles, trucks and other truck type vehicles. Consequently, figures shown from January 1972 for these categories are not strictly comparable with data for previous periods.

REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE

State or Territory and year	*Motor cars*	*Station wagons*	*Light commercial type vehicles*		*Trucks (carrying capacity 1 tonne and over)*		*Other truck type vehicles*	*Buses*	*Total (excludes motor cycles)*	*Motor cycles*
			open	*closed*	*rigid*	*articu-lated*				
1975—										
New South Wales	143,115	25,046	13,657	13,167	11,052	1,127	137	1,299	208,600	20,237
Victoria	108,173	18,043	8,238	8,656	7,100	967	146	805	152,128	8,719
Queensland	52,052	9,943	8,216	5,256	7,278	526	20	218	83,509	15,519
South Australia	42,045	6,027	3,761	2,942	2,768	427	33	269	58,272	7,655
Western Australia	34,755	6,797	5,101	4,458	3,867	348	52	383	55,761	6,214
Tasmania	13,130	2,051	1,228	1,249	1,004	133	16	215	19,026	2,254
Northern Territory	1,744	695	861	290	1,168	46	9	48	4,861	947
Australian Capital Territory	7,567	1,441	567	740	487	30	8	218	11,058	920
Australia	**402,581**	**70,043**	**41,629**	**36,758**	**34,724**	**3,604**	**421**	**3,455**	**593,215**	**624,465**
1974	413,674	61,924	43,932	32,259	30,131	3,473	392	2,733	588,518	80,538
1973	402,123	57,802	43,118	30,879	31,242	3,878	375	2,441	571,858	77,222
1972	353,924	51,928	38,526	23,513	26,869	2,913	340	2,047	500,060	54,641
1971	362,669	54,555	(*a*) 33,822	(*a*) 22,908	(*a*) 26,900		(*a*) 1,263	2,394	504,511	48,786

(*a*) Not directly comparable with figures subsequent to 1971.

Drivers' and riders' licences

At 30 June 1975 the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 2,513,321; Victoria, 1,885,874; South Australia, 632,056; Western Australia, 562,724; Tasmania, 194,564; Northern Territory, 27,318; Australian Capital Territory, 110,665. Particulars are not available for Queensland.

ROAD TRAFFIC ACCIDENTS

Compulsory fitting and use of seat belts and protective helmets in Australia

Through the endorsement of the Australian Transport Advisory Council of Australian Design Rules for Motor Vehicle Safety, the fitting of belts in passenger cars and derivatives in each State was made mandatory for new motor vehicles from 1 January 1970 for front seats and from 1 January 1971 for all positions.

The year 1973 saw the completion of laws requiring the compulsory wearing of seat belts, where fitted, in all motor vehicles, and the mandatory use of protective helmets by motor cycle riders and pillion passengers. The dates on which the laws came into effect were as follows:

	Seat belts	*Protective helmets*
New South Wales	1 October 1971	1 August 1971
Victoria	22 December 1970	1 January 1961
Queensland	1 January 1972	24 October 1970
South Australia	29 November 1971	31 December 1967
Western Australia	24 December 1971	1 May 1971
Tasmania	13 October 1971	19 December 1966
Northern Territory	1 January 1972	8 November 1972
Australian Capital Territory	1 January 1972	18 March 1973

The laws in force differ between States and Territories on matters such as exemptions and penalties. The exemptions for seat belts relate primarily to delivery men, persons reversing motor vehicles, the elderly, children under the age of 8 years, and persons exempted by a doctor's certificate. There are some minor exemptions for motorcyclists including persons exempted for medical reasons; passengers carried in sidecars in New South Wales, Victoria, South Australia, and Tasmania, persons exempted for religious reasons in New South Wales, and motorcyclists travelling at less than 24 kilometres per hour in South Australia.

The vast majority of belts fitted to vehicles are of the lap-sash type. Recent developments in seat belt design are aimed to improve their comfort to the wearer, their ease of adjustment and their effectiveness.

Accidents involving casualties, persons killed, persons injured

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED, 1975

				Per 100,000 of mean population			*Per 10,000 motor vehicles registered(b)*		
State or Territory	*Number of accidents*	*Persons killed*	*Persons injured*	*Number of accidents*	*Persons killed*	*Persons injured*	*Number of accidents*	*Persons killed*	*Persons injured*
New South Wales	28,217	1,288	38,141	587	27	794	132	6	178
Victoria	12,514	910	17,437	340	25	473	73	5	102
Queensland	8,241	635	11,019	412	32	551	87	7	116
South Australia	8,793	339	12,020	710	27	971	143	6	195
Western Australia	5,104	304	6,832	453	27	606	90	5	120
Tasmania	1,496	122	2,137	368	30	525	76	6	109
Northern Territory	554	64	789	625	72	891	115	13	164
Australian Capital Territory	869	32	1,124	452	17	585	83	3	107
Australia	**65,788**	**3,694**	**89,499**	**486**	**27**	**661**	**104**	**6**	**141**

(*a*) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (*b*) Average number of motor vehicles (excluding tractors, plant and equipment) on register.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): NUMBER OF ACCIDENTS PERSONS KILLED OR INJURED

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*		
									Number	*Per 100,000 of mean population*	*Per 10,000 motor vehicles registered*(*b*)
Accidents involving casualties—											
1971 . . .	26,575	15,023	8,147	7,386	5,178	1,385	660	856	65,210	510	129
1972 . . .	27,365	14,757	7,863	8,116	4,909	1,371	592	777	65,750	506	123
1973 . . .	29,308	14,485	8,643	9,267	5,404	1,479	711	854	70,151	533	124
1974 . . .	29,853	12,542	8,086	9,469	4,742	1,393	575	813	67,473	504	112
1975 . . .	28,217	12,514	8,241	8,793	5,104	1,496	554	869	65,788	486	104
Persons killed—											
1971 . . .	1,249	923	594	292	332	130	50	20	3,590	28	7
1972 . . .	1,092	915	572	312	340	106	53	32	3,422	26	6
1973 . . .	1,230	935	638	329	358	105	55	29	3,679	28	7
1974 . . .	1,275	806	589	382	334	111	44	31	3,572	27	6
1975 . . .	1,288	910	635	339	304	122	64	32	3,694	27	6
Persons injured—											
1971 . . .	36,660	21,371	11,387	10,132	7,328	2,056	926	1,176	91,036	712	180
1972 . . .	36,814	20,646	10,788	10,997	6,751	1,968	795	1,007	89,766	691	168
1973 . . .	39,294	20,011	11,660	12,625	7,377	2,103	1,012	1,122	95,204	723	169
1974 . . .	40,429	17,539	10,627	12,725	6,277	1,911	788	1,042	91,338	683	152
1975 . . .	38,141	17,437	11,019	12,020	6,832	2,137	789	1,124	89,499	661	141

(*a*) *See* footnote (*a*) to previous table. (*b*) *See* footnote (*b*) to previous table.

Types of road user killed or injured

Responsibility for cause of accident is not indicated by this classification.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): PERSONS KILLED OR INJURED, TYPES OF ROAD USER INVOLVED, 1975

Type of road user	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PERSONS KILLED									
Drivers of motor vehicles	475	341	225	136	122	48	20	13	1,380
Motor cyclists . .	142	70	72	30	24	13	8	6	365
Pedal cyclists . .	21	16	22	14	7	3	..	2	85
Passengers (all types)(*b*) .	388	287	209	98	94	36	27	8	1,147
Pedestrians . . .	257	194	107	61	52	22	9	3	705
Other classes(*c*) . .	5	2	..	..	5	..	..	..	12
Total . . .	**1,288**	**910**	**635**	**339**	**304**	**122**	**64**	**32**	**3,694**
PERSONS INJURED									
Drivers of motor vehicles	14,468	6,756	3,927	4,663	2,867	798	277	439	34,195
Motor cyclists . . .	4,483	1,598	1,804	1,738	678	221	135	197	10,854
Pedal cyclists . .	754	590	359	529	204	47	10	50	2,543
Passengers (all types)(*b*) .	14,004	6,649	4,074	4,209	2,389	866	319	368	32,878
Pedestrians . . .	4,369	1,816	849	876	675	204	48	68	8,905
Other classes(*c*) . . .	63	28	6	5	19	1	..	2	124
Total . . .	**38,141**	**17,437**	**11,019**	**12,020**	**6,832**	**2,137**	**789**	**1,124**	**89,499**

(*a*) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (*b*) Includes pillion riders. (*c*) Includes bystanders, tram-drivers, riders of horses and drivers of animal-drawn vehicles.

Age groups of persons killed or injured

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*): PERSONS KILLED OR INJURED BY AGE GROUP, 1975

Age group (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
PERSONS KILLED									
Under 5	49	34	29	11	15	3	3	2	146
5 and under 7	16	12	11	5	4	2	1	..	51
7 „ „ 17	105	74	62	34	29	11	4	3	322
17 „ „ 21	255	187	132	70	64	43	2	11	764
21 „ „ 30	272	203	125	60	58	25	29	7	779
30 „ „ 40	131	86	75	27	38	7	10	1	375
40 „ „ 50	109	78	62	32	36	11	5	3	336
50 „ „ 60	121	72	54	39	18	1	3	..	308
60 and over	221	163	85	61	42	19	4	5	600
Not stated	9	1	..	..	..	..	3	..	13
Total	**1,288**	**910**	**635**	**339**	**304**	**122**	**64**	**32**	**3,694**
PERSONS INJURED									
Under 5	1,298	591	330	307	218	72	25	33	2,874
5 and under 7	704	310	175	174	147	45	6	14	1,575
7 „ „ 17	4,298	2,013	1,398	1,686	731	357	87	140	10,710
17 „ „ 21	8,650	3,895	2,995	2,826	1,520	601	136	292	20,915
21 „ „ 30	9,209	4,219	2,548	2,334	1,501	450	271	290	20,822
30 „ „ 40	4,303	1,893	1,071	1,032	725	184	132	119	9,459
40 „ „ 50	3,364	1,417	795	804	545	144	48	82	7,199
50 „ „ 60	2,863	1,259	697	693	423	127	40	56	6,158
60 and over	2,982	1,348	829	669	474	144	21	45	6,512
Not stated	470	492	181	1,495	548	13	23	53	3,275
Total	**38,141**	**17,437**	**11,019**	**12,020**	**6,832**	**2,137**	**789**	**1,124**	**89,499**

(*a*) *See* footnote (*a*) to previous table.

Types of accidents

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(*a*)
NUMBER OF ACCIDENTS AND PERSONS KILLED OR INJURED, BY TYPE OF ACCIDENT, 1975

Type of accident	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust*
NUMBER OF ACCIDENTS									
Collisions between vehicles	16,116	7,003	4,273	5,298	2,737	792	256	514	36,989
Vehicle overturning or leaving road . .	3,381	906	2,495	1,340	1,420	422	154	164	10,282
Vehicle colliding with pedestrian . .	4,212	1,819	905	894	708	214	51	67	8,870
Vehicle colliding with fixed object(*b*) . .	4,108	2,441	375	1,115	144	52	74	104	8,413
Passenger accidents .	78	142	48	41	28	6	5	14	362
Vehicle colliding with animal . . .	291	101	128	78	54	9	14	6	681
Other. . . .	31	102	17	27	13	1	. .	. .	191
Total . .	**28,217**	**12,514**	**8,241**	**8,793**	**5,104**	**1,496**	**554**	**869**	**65,788**
PERSONS KILLED									
Collisions between vehicles	562	389	266	143	101	56	19	18	1,554
Vehicle overturning or leaving road . .	172	73	238	90	140	41	17	3	774
Vehicle colliding with pedestrian . .	243	190	104	60	52	22	8	3	682
Vehicle colliding with fixed object(*b*) . .	301	242	16	41	6	1	16	7	630
Passenger accidents .	8	8	4	2	2	2	2	1	29
Vehicle colliding with animal . . .	2	3	5	. .	3	. .	2	. .	15
Other. . . .	. .	5	2	3	. .	. .	. .	. .	10
Total . .	**1,288**	**910**	**635**	**339**	**304**	**122**	**64**	**32**	**3,694**
PERSONS INJURED									
Collisions between vehicles	23,461	10,728	6,144	7,599	3,918	1,249	380	708	54,187
Vehicle overturning or leaving road . .	4,544	1,285	3,326	1,890	1,928	601	244	198	14,016
Vehicle colliding with pedestrian . .	4,254	1,708	861	891	682	206	47	67	8,716
Vehicle colliding with fixed object(*b*) . .	5,432	3,339	464	1,466	196	65	93	131	11,186
Passenger accidents .	75	145	44	48	26	4	3	13	358
Vehicle colliding with animal . . .	343	121	163	96	66	11	22	7	829
Other. . . .	32	111	17	30	16	1	. .	. .	207
Total . .	**38,141**	**17,437**	**11,019**	**12,020**	**6.832**	**2,137**	**789**	**1,124**	**89,499**

(*a*) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (*b*) Includes parked vehicles.

ROADS

Summary of roads used for general traffic

Proclaimed or declared roads. The table following is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30 June 1975. The central road authority in each State assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance of these roads, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points: availablity of funds; whether the road is, or will be, within one of several classes of main trunk routes; the value of the roads as connecting links between centres of population or business; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g. insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettal of roads, and, therefore, the condition of a road may not match its status.

PROCLAIMED OR DECLARED ROADS: LENGTHS, STATES, 30 JUNE 1975
(Kilometres)

Class of road	*N.S.W.*	*Vic.(a)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
State highways	10,492	(*b*)7,262	10,179	13,593	12,798	1,937	105,571
Trunk roads	7,081	14,604	126			..	
Ordinary main roads	18,316		8,118			1,065	
Total main roads	*35,889*	*21,866*	*18,423*	*13,593*	*12,798*	*3,002*	*105,571*
Secondary roads	(*c*)287	..	(*d*)13,763	..	8,252	292	22,594
Development roads	3,619	..	7,609	..	..	198	11,426
Tourist roads	399	801	..	..	..	114	1,314
Other roads	2,566	(*e*)1,039	..	..	..	..	3,605
Total other roads	*6,871*	*1,840*	*21,372*	..	*8,252*	*604*	*38,938*
Grand total	**42,760**	**23,706**	**39,795**	**13,593**	**21,050**	**3,606**	**144,510**

(*a*) As from 1 July 1974 the Country Roads Board acquired the road making powers, roads and relevant staff of the Melbourne and Metropolitan Board of Works. (*b*) Includes 206 kilometres of freeways constructed by the Country Roads Board. (*c*) Metropolitan only. (*d*) Includes mining access roads, farmers' roads and tourist tracks. (*e*) Forest roads.

Total roads. The following table represents an attempt to classify all the roads open for genera traffic in Australia, at the latest dates available, according to States and Territories and to certain broad surface groups. The figures in the table for the States are obtained from the Deputy Commonwealth Statistician in each State, and are derived mainly from local government sources.

ALL ROADS OPEN FOR GENERAL TRAFFIC
LENGTHS, STATES AND TERRITORIES, 30 JUNE 1975
(Kilometres)

Surface of roads	*N.S.W.(a)*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*(a)Total*
Bitumen or concrete	66,878	55,789	40,044	17,617	30,666	6,937	4,652	1,437	224,020
Gravel, crushed stone or other improved surface	65,499	45,989	30,998	21,211	31,252	13,277	1,597	375	210,198
Formed only	41,919	28,177	61,322	24,401	45,267	778	4,942	42	410,771
Cleared only	14,690	29,193	59,451	37,026	54,469		9,094	..	
Total	**188,985**	**159,148**	**191,815**	**100,255**	**161,654**	**20,993**	**20,285**	**1,854**	**844,989**

(*a*) Excludes 20,286 kilometres of road dedicated but not trafficable.

Further information on roads, including financial particulars, is included in Chapter 18. Public Finance.

National Association of Australian State Road Authorities

The National Association of Australian State Road Authorities (N.A.A.S.R.A.) was established in 1934 under the title 'Conference of State Road Authorities of Australia', the present name being adopted in 1959. Initially the member authorities were the central road authority in each State but in 1949 this was extended to include the Commonwealth Government Department of Works. The present member authorities are: Department of Main Roads, New South Wales; Country Roads Board, Victoria; Main Roads Department, Queensland; Highways Department, South Australia; Main Roads Department, Western Australia; Department of Public Works, Tasmania; Commonwealth Government Department of Construction.

These authorities are directly responsible for the construction and maintenance of the primary road system which comprises approximately 14 per cent of roads in Australia. The primary roads, generally termed 'main roads', include the principal routes between States, routes linking large cities and regions within the States and certain major arterial roads. The authorities also have a limited responsibility for some secondary roads serving primary and secondary industry, and tourist roads.

The Association's objectives are to provide a central organisation where, by co-operative effort, a uniform approach to the improvement, planning and development of the Australian road system can be achieved. This is done by gathering together experienced engineers and administrators from the member Authorities into a series of committees to develop national standards for road and bridge design, construction and maintenance and to improve methods of administration and financial control. The policies and standards published are widely used by local government authorities and by universities as standard textbooks for courses in road engineering. For structural design, road signs, manufactured items and standard laboratory test procedures it has been a long standing policy of the Association to participate with the Standards Association of Australia in the preparation of national codes of practice.

One item of continuing interest to the Association is road research and in 1959 the Association decided to establish and finance a separate national road research centre. This centre, the Australian Road Research Board (A.R.R.B.), was established in 1960 as a company controlled by a Board consisting of the N.A.A.S.R.A. members. The director and staff of A.R.R.B. regularly report to the N.A.A.S.R.A. executive and technical committees the results and progress of research undertaken for N.A.A.S.R.A. and the individual road authorities.

The Association also assists the Commonwealth Government in a number of national and international projects. Within Australia direct grants are made for the construction of a number of roads and the Association has provided the basic data for the two Australian Roads Surveys. These surveys are conducted regularly in conjunction with the Commonwealth Bureau of Roads and form the basis for determining the Commonwealth Government's policy on financial aid for roads. The Association also regularly confers with the Commonwealth Government Department of Transport, the Commonwealth Bureau of Roads and Australian Transport Advisory Council on major roading policies. As part of the Commonwealth Government's external aid program and in conjunction with the Department of Foreign Affairs, member authorities of the Association conduct engineering training courses for experienced engineers from African and Asian countries.

The secretarial services of the Association are provided by a small staff located in Sydney. This office maintains contact with overseas road bodies and acts as a centre for the receipt and circulation of standards published by these organisations.

Australian Road Research Board

The Australian Road Research Board was established by the road authorities of the Commonwealth and State Governments in 1960 as a national centre for road research. The Board was incorporated in January 1965 as a public company limited by guarantee, memorandum and articles of association being drafted in general conformity with the constitution which had been accepted in 1960. The company members are the Commonwealth Government, the commissioners of the central road authorities in New South Wales, Queensland, South Australia, and Western Australia, the Department of Public Works, Tasmania, and the Country Roads Board, Victoria. The Secretary of the Commonwealth Government Department of Construction and the departmental heads of the other road authorities constitute the Board, which controls all policy and activities. Finance for all activities has been provided by the company members on an agreed basis.

The objectives of A.R.R.B. include planning an adequate program of research and development, arranging for individual projects to be carried out directly and by co-operating organisations, and providing conferences and publications to bring these and other advances to everyone interested in roads. Publications include *Proceedings* of biennial national research conferences commencing in 1962, the journal *Australian Road Research* issued a number of times a year, and separate reports and bulletins resulting from special research projects.

The following list of possible subjects indicates the range of studies provided for in the original constitution: road planning, location, design, safety, materials, construction, maintenance, structures, equipment, traffic and transport, economics, administration, financing, management, accounting, and any other matters affecting the provision, upkeep, use, protection, and development of roads. In planning a creative program the Board continues to look for those subjects which seem to offer the highest benefit to road engineers and the community.

The work on research projects is carried out either directly by the Board's own staff, in many cases acting in co-operation with the road authorities of the various governments, or through co-operative projects established with universities. The Board has endeavoured to provide or sustain the additional staff required for these external projects, but university staff members furnish advice and co-operation in all parts of these studies.

As with most research organisations, the Board has made very full use of systematic consultation through various advisory groups. Members of these groups have been recruited from persons with the ability to contribute, who were prepared to serve as individuals and not as representatives of particular organisations. In an attempt to secure completely unfettered counsel, most of the members of the advisory groups were drawn from outside the Board and its staff. The various committees include a general Advisory Council and several particular types of specialist committees. In addition, the technical committees of the National Association of Australian State Road Authorities have, with the initiation of A.R.R.B., been a continuing and valuable source of advice and consultation. In this way, therefore, exceedingly valuable advice has been obtained from individuals drawn from the State road authorities, local authorities, C.S.I.R.O., Australian universities, several Commonwealth Government departments, and from private companies and consultants.

Commonwealth Bureau of Roads

The Commonwealth Bureau of Roads is a Statutory Authority established under the provisions of the *Commonwealth Bureau of Roads Act* 1964. The Bureau consists of a full-time Chairman and two part-time members appointed by the Governor-General and is served by a small secretariat. Broadly, the responsibilities of the Bureau are to advise the Commonwealth Government, through the Minister for Transport, on matters relating to roads and road transport and government financial assistance in this area.

An article dealing with the development of roads in Australia is given in Year Book No. 60, pages 385–93.

AIR TRANSPORT

Department of Transport (Air Transport Group)

Control of air transport in Australia is exercised by the Department of Transport. The Department's jurisdiction covers Australia and areas of the Indian and Pacific Oceans. Year Books Nos. 16, 19 and 38 trace the establishment of air transport control in Australia and the appropriate Acts of Parliament and Regulations under which this control is exercised. The present functions of the Department are shown in Year Book No. 51, pages 578–9, and further details about its operations are given in the annual reports to the Commonwealth Parliament by the Minister for Transport.

Regular air services within Australia

Interstate services. The majority of scheduled interstate services with passenger and all-freight aircraft are provided by two airlines only, the private enterprise airline Ansett Airlines of Australia (a division of Ansett Transport Industries (Operations) Pty. Ltd., which is a subsidiary of Ansett Transport Industries Ltd.) and the Commonwealth Government-owned Trans-Australia Airlines. All principal routes are competitive, with both airlines providing equal capacities in accordance with legislation passed by the Commonwealth Parliament. The two principal Acts which establish the legislative basis of this controlled competition are the *Airlines Agreement Act* 1952 and the *Airlines Equipment Act* 1958. The Airlines Equipment Act established the machinery for the achievement and maintenance of comparable, but not necessarily identical, aircraft fleets between T.A.A. and Ansett

Airlines of Australia, and is designed to prevent the provision of excess aircraft capacity. The Airlines Agreement Act established the basis of control of the two-airline competitive system and extended this machinery until at least 1982.

In addition to purely interstate services, both Ansett Airlines of Australia and Trans-Australia Airlines operate non-competitive intrastate routes in Australia. The Ansett Airlines of Australia non-competitive routes radiate mainly from Melbourne, while those of Trans-Australia Airlines are located within Queensland.

At 30 June 1975 the Ansett Airlines of Australia fleet included twelve Boeing 727s, twelve DC-9s, eleven Friendships, three L188(F)s and two helicopters. At the same date Trans-Australia Airlines operated a fleet of twelve Boeing 727s, twelve DC-9s, fifteen Friendships and five Twin Otter DHC-6.

Intrastate services. In addition to the intrastate services operated by Ansett Airlines of Australia and Trans-Australia Airlines there are a number of smaller regional airlines operating from Sydney (Ansett Airlines of New South Wales and East-West Airlines), Adelaide (Ansett Airlines of South Australia), Perth (MacRobertson Miller Airlines), and Alice Springs (Connair). With the exception of Connair, which provides regular service to outback homesteads and communities, all of these are concerned primarily with traffic moving to and from the respective capital city. With the exception of the independently owned East-West Airlines and Connair, all regional airlines are divisions of Ansett Transport Industries (Operations) Pty. Ltd. The larger aircraft used by these regional airlines are Fellowships, Friendships and Convairs. Connair uses DC3s, Herons and smaller aircraft types.

Commuter services. These are not airline services but regular flights by charter firms with small single and twin-engined aircraft operating to fixed and published timetables. They provide regular air links between many centres, towns and country areas which are either not served by the major airlines or have no direct air service with their capital or nearest major provincial city. The first commuter service approved was for Opal Air Pty Ltd, of Coober Pedy (S.A.), to operate between Adelaide and the South Australian opal fields. At 30 June 1975 twenty-nine charter operators were operating commuter services in Australia. Details of the operations of these commuter services are excluded from the statistics shown in this section.

Scheduled domestic airline services. Statistics of all regular airline services are set out in the following table.

AIR TRANSPORT: OPERATIONS OF REGULAR INTERNAL SERVICES AUSTRALIA(*a*)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Hours flown	number	258,793	248,774	256,435	281,611	282,706
Kilometres flown	'000	114,605	115,931	121,605	135,209	138,928
Passengers—						
Embarkations	number	6,340,036	6,629,316	7,502,892	8,857,654	9,393,104
Passenger-kilometres	'000	4,974,220	5,276,524	5,842,540	7,001,336	7,578,752
Freight—						
Tonnes uplifted	tonnes	91,401	89,883	94,425	112,654	107,813
Tonne-kilometres	'000	78,047	76,475	84,039	101,334	100,942
Mail—						
Tonnes uplifted	tonnes	9,916	10,137	10,114	9,916	9,613
Tonne-kilometres	'000	9,329	9,589	10,100	9,569	9,312

(*a*) Includes flights of all Australian-owned airlines, with the exception of those of Qantas Airways Limited, between airports located within Australia.

Internal airline passenger embarkation and disembarkation

The statistics set out in the next table have been compiled by aggregating all internal airline passenger traffic loaded and unloaded at each airport. They include passengers on flights between Australia and Papua New Guinea and Australia and Norfolk Island. At ports where through-passengers transfer between flights, such passengers are counted as embarking as well as disembarking passengers.

INTERNAL AIRWAYS PASSENGER EMBARKATIONS AND DISEMBARKATIONS AT PRINCIPAL AUSTRALIAN AIRPORTS

Airport	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Sydney	3,515,231	3,694,498	4,162,659	4,679,513	4,953,051
Melbourne	2,750,602	2,861,896	3,226,294	3,876,877	4,037,585
Brisbane	1,347,118	1,448,920	1,658,043	2,078,812	2,218,780
Adelaide	1,019,320	1,046,840	1,154,384	1,374,645	1,494,675
Canberra	596,171	670,608	813,712	934,069	981,815
Perth	510,328	545,890	536,057	646,699	696,527
Hobart	222,397	227,016	282,676	382,636	375,769
Townsville	197,942	202,160	231,665	315,782	320,153
Coolangatta	166,239	188,917	243,994	278,044	300,854
Launceston	197,500	208,090	244,982	294,694	287,741
Cairns	158,986	182,300	204,414	251,847	266,620
Darwin	118,375	131,703	141,696	182,319	241,003
Mackay	125,220	133,806	159,408	196,951	213,972
Rockhampton	97,264	101,685	113,823	153,075	160,687
Alice Springs	57,299	65,497	89,018	126,572	151,566
Devonport	71,426	75,388	84,290	105,447	104,150
Wynyard	65,563	70,597	75,532	88,074	93,209
Mount Isa	67,938	69,760	68,741	79,297	81,147
Tamworth	50,870	59,557	67,479	74,650	80,409
Wagga	52,181	52,511	56,651	61,723	69,581
Dubbo	55,574	50,827	56,566	58,939	64,925
Kingscote	51,135	47,993	48,609	59,107	61,696

International activity

International organisations. A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council, and the South Pacific Air Transport Council appeared in Year Book No. 37, and particulars of subsequent activity in the international field were included in No. 38. The International Civil Aviation Organization had a membership of 129 nations in June 1975. Australia has continued its position as a member of the Council, which it has held since I.C.A.O. was established in 1947. Further details will be found in Year Book No. 40 and earlier issues.

International agreements. Australia had air service agreements in force with twenty-four countries at 30 June 1975. They were Austria, Britain, Canada, Sri Lanka, Egypt, Fiji, France, Federal Republic of Germany, Greece, India, Indonesia, Ireland, Italy, Japan, Lebanon, Malaysia, Nauru, Netherlands, New Zealand, Philippines, Singapore, Republic of South Africa, Thailand, and the United States of America. Under these agreements Australia is granted rights to operate services between Australia to and through the countries in question; these rights are exercised by Australia's international airline Qantas. In return, the designated airlines of the other countries which are partners to these agreements are granted traffic rights in Australia. Australia also had air service arrangements granting traffic rights with eight other countries at 30 June 1975. These were Bahamas, Bahrain, Iran, Mauritius, Mexico, Portugal, Syria and Turkey.

International air services. At 30 June 1975, twenty-three overseas international airlines were operating regular scheduled services to Australia. These are: Air-India (India), Air Nauru (Nauru), Air New Zealand (New Zealand), Air Niugini (New Guinea), Air Pacific (Fiji), Alitalia (Italy) British Airways Overseas Division (Britain), Canadian Pacific Air Lines (Canada), Cathay Pacific (Hong Kong), Deutsche Lufthansa (Federal Republic of Germany), Garuda (Indonesia), Japan Air Lines (Japan), J.A.L. (Yugoslavia), K.L.M. Royal Dutch Airlines (Netherlands), Singapore International Airlines (Singapore), Merpati Nusantara Airlines (Indonesia), Olympic Airways (Greece), Pan American World Airways (United States of America), Philippines Air Lines (Philippines), South African Airways (Republic of South Africa), Thai International (Thailand) and Union de Transport Aeriens (France). Qantas, Australia's international airline, operates a fleet of twenty-seven aircraft of which fourteen are Boeing 707-338C jet aircraft and ten are Boeing 747B jet aircraft. All the shares in Qantas Airways Limited are owned by the Commonwealth Government.

International operations. The table following shows particulars of international airline traffic during 1974–75 moving into and out of an area which embraces Australia, Papua New Guinea, and Norfolk Island. These figures do not include traffic between Australia and Papua New Guinea and Norfolk Island.

AIR TRANSPORT: INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(*a*), 1974–75

Type of traffic	*Aircraft movements*	*Passengers*	*Freight*	*Mail*
Traffic to Australia—			tonnes	tonnes
Qantas Airways Limited	5,469	561,959	13,032	663
Other airlines	8,125	658,901	28,174	3,795
All airlines	**13,594**	**1,220,860**	**41,206**	**4,458**
Traffic from Australia—				
Qantas Airways Limited	5,510	533,577	10,120	1,833
Other airlines	7,909	637,665	14,432	698
All airlines	**13,419**	**1,171,242**	**24,552**	**2,531**

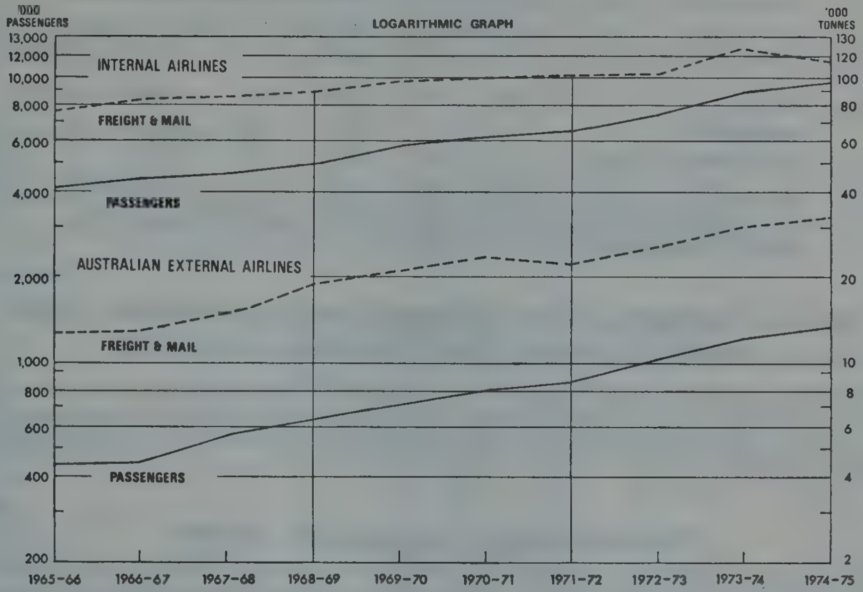
(*a*) Australian mainland, and Papua New Guinea and Norfolk Island.

Statistics covering the operations of Australia's regular overseas services are shown in the following table. These operations include all stages of Qantas flights linking Australia with external territories and overseas countries, and stages external to Australia for flights of other Australian-owned airlines; they exclude flights over stages located within Papua New Guinea.

AIR TRANSPORT: OPERATIONS OF AUSTRALIA'S REGULAR OVERSEAS SERVICES

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Hours flown	number	97,307	91,357	87,548	90,293	86,231
Kilometres flown	'000	70,346	66,270	64,823	69,062	65,045
Passengers—						
Embarkations	number	839,629	885,548	1,054,929	1,295,457	1,418,541
Passenger-kilometres	'000	4,446,906	4,892,044	6,775,195	8,653,357	9,434,345
Freight—						
Tonnes uplifted	tonnes	21,455	20,961	23,239	27,328	29,974
Tonne-kilometres	'000	155,143	143,514	150,342	195,078	213,748
Mail—						
Tonnes uplifted	tonnes	2,819	2,841	2,791	2,912	2,950
Tonne-kilometres	'000	22,862	24,627	22,891	25,071	24,043

CIVIL AVIATION: AUSTRALIA, 1965-66 TO 1974-75
PAYING PASSENGERS AND FREIGHT CARRIED



NOTE. VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO THE RATE OF INCREASE OR DECREASE, ACTUAL NUMBERS ARE INDICATED BY THE SCALE

PLATE 38

General aviation

General aviation activity, which covers all non-airline operations such as charter, aerial work and private flying, has grown rapidly throughout Australia in recent years and is an important sector of the Australian aviation industry. In 1974–75 the general aviation hours flown, chiefly with light aircraft totalled 1,100,000 compared with 300,000 hours flown by Australian airline aircraft. At 30 June 1975 aircraft employed in general aviation numbered 4,115.

Aerodromes

The number of aerodromes throughout Australia and its External Territories at 30 June 1975 was 473. Ninety-three were owned by the Commonwealth Government and 380 by local authorities and private interests. Capital expenditure on aerodrome and building construction was $13.6 million in 1974–75. Maintenance expenditure on Commonwealth Government-owned aerodromes during 1974–75 was $4.4 million, and development and maintenance grants to licensed aerodromes participating in the Local Ownership Plan totalled $1,289,000.

Airways facilities

A total of 404 navigational aids were in service at 30 June 1975. The total includes 224 non-directional beacons (NDB), 101 distance measuring equipment (DME), 8 international distance measuring equipment (DMEI), 13 visual-aural ranges (VAR), 41 VHF omni-directional ranges (VOR), 16 instrument landing systems (ILS) and one twin locator approach system.

One hundred and thirty-five aerodromes are now equipped with night landing facilities. Seventy-nine Australian designed 'T' systems (T-VASIS), are operating. Seven long range surveillance radars and two short-range (TAR) are also in operation. There are thirty-one fully equipped Air Traffic Control Centres and sixty flight service units.

Air transport registrations, licences, etc., in force in Australia

At 30 June 1975 there were 4,269 aircraft registered in Australia. There were also, at 30 June 1975, 34,046 pilots' licences in force of which 15,312 were private pilots' licences, 3,470 commercial pilots' licences, and 12,542 student pilots' licences. Flight radio-telephone operators' licences numbered 22,984.

Accidents and casualties

AIR TRANSPORT: ACCIDENTS INVOLVING CASUALTIES(*a*)
AUSTRALIA(*b*)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Number	31	28	30	34	24
Persons killed	48	37	41	46	25
Persons seriously injured	24	23	8	19	16

(*a*) Accidents involving civil aircraft which resulted in death or serious injury. Excludes parachutists killed on contact with earth after an uninterrupted fall. (*b*) Excludes accidents outside Australia involving aircraft on the Australian register.

POSTS: INTERNAL AND OVERSEAS TELECOMMUNICATION SERVICES RADIOCOMMUNICATION STATIONS

In this division particulars for the Australian Capital Territory are included with those for New South Wales, and the South Australian figures include particulars for the Northern Territory, unless otherwise indicated. The Central Office of the Postal and Telecommunications Department is located in Melbourne, Victoria.

Postmaster-General's Department—General

Early in 1975, legislation was passed to establish two statutory authorities—the *Australian Telecommunications Commission* and the *Australian Postal Commission*—which took over the postal and telecommunications responsibility of the Postmaster-General's Department from 1 July 1975. The residual functions of the former department will remain with the new Postal and Telecommunications Department. This mainly involves the administration of the *Wireless Telegraphy Act* which concerns the licensing and management of the radio frequency spectrum. The new Department also took over, from the former Department of the Media, the responsibility for policy matters concerned with broadcasting.

The principal functions of the Department are reflected in the *Post and Telegraph Act* 1901. Since its establishment the Department assumed other responsibilities some of which are currently reflected in the *Wireless Telegraphy Act* 1905 and the *Broadcasting and Television Act* 1942.

The basic role of the Department was to provide within Australia a network of facilities which enable people and organisations:

to send letters, printed matter, parcels and money in Australia and overseas and to receive such items within Australia from overseas.

to converse by telephone in Australia and overseas.

to send and receive written messages, data, pictures and other visual matter by electrical means within Australia and to and from overseas.

to relay on the telecommunications network, radio and television broadcasts emanating within Australia and those on relay to and from overseas.

In addition the Department has the following responsibilities:

to plan and manage the radio frequency spectrum and regulate radio communications service;

to construct, maintain and operate the transmitters of the National Broadcasting and Television Service and the Radio Australia Service (*see* pages 416–18); and

to provide agency services for Australian and State Government Departments and other instrumentalities

Postal facilities

The following table shows the number of post offices, the area in square kilometres and the number of inhabitants to each post office (including non-official offices), and the number of inhabitants to each 100 square kilometres in each State and in Australia at 30 June 1975.

POSTAL FACILITIES: RELATION TO AREA AND POPULATION, 30 JUNE 1975

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Post offices—							
Official	510	331	215	171	161	46	1,434
Non-official	1,455	1,174	790	590	391	234	4,634
Total post offices	**1,965**	**1,505**	**1,005**	**761**	**552**	**280**	**6,068**
Square kilometres of territory per office	409	151	1,719	3,062	4,575	242	1,266
Inhabitants per office	2,535	2,441	1,987	1,737	2,034	1,450	2,225
Inhabitants per 100 square kilometres	620	1,614	116	57	44	599	176

Employment

PERSONS PROVIDING POST OFFICE SERVICES: CENTRAL OFFICE AND STATES 30 JUNE 1975

	Central Office	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Official full-time staff(a)—								
Permanent officers	3,530	30,296	22,540	13,931	9,847	8,176	2,877	91,197
Temporary and exempt employees	167	13,994	8,414	3,946	1,857	1,851	545	30,774
Total	*3,697*	*44,290*	*30,954*	*17,877*	*11,704*	*10,027*	*3,422*	*121,971*
Other(b)—								
Non-official postmasters and postmistresses	..	1,455	1,174	790	590	391	234	4,634
Other staff at non-official offices	..	561	460	337	190	74	24	1,646
Telephone office-keepers	..	77	9	14	45	54	1	200
Mail contractors (including persons employed to drive vehicles)	..	1,607	878	801	285	300	162	4,033
Total	..	*3,700*	*2,521*	*1,942*	*1,110*	*819*	*421*	*10,513*
Grand total	**3,697**	**47,990**	**33,475**	**19,819**	**12,814**	**10,846**	**3,843**	**132,484**

(a) Persons directly under the control of the Department. Excludes 3,893 part-time staff. (b) Persons not directly under the control of the Department. Includes persons employed either full-time or part-time under contract or in return for payments appropriate to work performed.

Financial operations—Postmaster-General's Department

The financial tables which follow allow for the changed accounting arrangements introduced by the Postmaster-General's Department following amendment of the Post and Telegraph Act in 1968.

Earnings

The following table shows the earnings of the Postmaster-General's Department as taken from successive Profit and Loss Statements.

POSTMASTER-GENERAL'S DEPARTMENT: EARNINGS, BY SOURCE AUSTRALIA ($'000)

	Postal service				*Telecommunications service*					
Year	*Postages*	*Money order and postal order fees*	*Commission on agency services*	*Other earnings*	*Telephone rentals*	*Telephone calls*	*Telegrams*	*Leased telegraph services*	*Other earnings (a)*	*Total*
1965–66	107,402	2,771	4,277	2,296	93,856	154,304	11,639	6,144	18,585	401,274
1966–67	110,317	2,919	4,300	2,452	100,823	171,100	11,868	7,018	20,691	431,488
1967–68	127,748	3,178	4,406	2,847	108,293	211,812	14,172	7,478	22,722	502,656
1968–69	142,770	3,400	5,591	3,175	116,974	245,571	14,711	8,145	26,872	567,208
1969–70	149,036	3,505	5,698	3,628	126,669	280,757	15,120	9,253	31,579	625,244
1970–71	171,548	4,246	6,348	3,457	153,658	312,111	17,369	10,880	35,996	715,613
1971–72	196,361	4,618	7,857	4,528	184,975	387,538	17,284	12,965	42,367	858,493
1972–73	207,277	4,778	10,055	4,386	192,244	435.404	18,185	13,759	50,973	937.061
1973–74	224.246	4,944	11,863	3,943	235,816	517,375	19,499	15,155	65,590	1,098,431
1974–75	274,073	5,653	13,207	9,055	301,466	637,804	25,775	16,912	86,668	1,370,612

(a) Includes fees for advertisements in telephone directories, proceeds of sales of fixed assets, telephone service connection fees and telex call fees.

Expenses

This table shows the operating and maintenance expenses of the Postmaster-General's Department as taken from successive Profit and Loss Statements.

POSTMASTER-GENERAL'S DEPARTMENT: EXPENSES, BY SOURCE AUSTRALIA

($'000)

	Postal service			Telecommunications service			
Year	*Operating maintenance and general*	*Carriage of mail*	*Depreciation, superannuation, long service leave and interest*	*Operating and general*	*Maintenance of plant*	*Depreciation, superannuation, long service leave and interest*	*Total*
1965–66	84,868	31,143	11,077	74,451	66,489	133,370	401,398
1966–67	95,775	32,395	15,398	83,154	74,063	152,205	452,991
1967–68	107,016	33,114	18,209	92,614	83,645	177,707	512,305
1968–69	106,682	35,678	21,277	101,861	95,022	198,651	559,171
1969–70	123,615	34,911	23,208	116,920	105,711	218,897	623,262
1970–71	144,352	37,722	29,014	135,321	121,731	249,116	717,256
1971–72	155,306	34,880	34,431	154,587	138,123	281,366	798,694
1972–73	173,265	35,404	38,719	176,607	160,182	311,662	895,838
1973–74	203,185	36,638	59,691	217,784	203,635	372,825	1,093,757
1974–75	262,006	42,214	62,364	282,744	250,187	440,567	1,340,083

Profit or loss

The following table shows the net results of the Department's operations for the year 1974–75 together with summarised particulars for the year 1973–74.

POSTMASTER-GENERAL'S DEPARTMENT CONSOLIDATED STATEMENT OF PROFIT AND LOSS, AUSTRALIA 1973–74 AND 1974–75

($'000)

	1973–74	*1974–75*		
	All services	*Postal service*	*Telecommunications service*	*All services*
Earnings	1,098,431	301,988	1,068,624	1,370,612
Expenses—				
Operating, maintenance and general	661,242	304,221	532,930	837,151
Depreciation	171,514	7,216	185,656	192,872
Superannuation	78,711	32,392	63,890	96,282
Long service leave	20,266	8,871	17,326	26,197
Total expenses	*931,733*	*352,700*	*799,802*	*1,152,502*
Profit or loss before interest	166,698	−50,712	268,822	218,110
Interest	162,024	13,885	173,696	187,581
Profit or loss after interest	**4,674**	**−64,597**	**95,126**	**30,529**

Minus sign (—) denotes loss.

Fixed assets, Postmaster-General's Department

POSTMASTER-GENERAL'S DEPARTMENT: TRANSACTIONS AFFECTING FIXED ASSETS 1974–75
($'000)

Class of plant	*Value at 1 July 1974*	*Additions during year*	*Instalments of plant written out*	*Value at 30 June 1975*
Telecommunications plant	3,802,108	576,669	42,813	(*a*)4,335,964
Postal plant	30,153	4,007	665	(*b*)33,365
Engineers' moveable plant	59,769	12,037	4,968	66,838
Motor vehicles	43,842	12,604	8,357	48,089
Other plant and equipment	62,048	9,561	2,145	69,464
Buildings	466,579	72,742	1,015	(*c*)538,306
Land	66,570	10,508	131	76,947
Total	**4,531,068**	**698,127**	**60,094**	(*b*)**5,168,973**

(*a*) Includes plant under construction valued at $212,955,651. (*b*) Excludes $128,561 adjustment for changed service lives. (*c*) Includes buildings under construction valued at $58,343,722.

Postal services

Mail delivery network

MAIL DELIVERY NETWORK(*a*): 31 MARCH 1975

	Number of mail delivery points				
State	*Postmen's delivery*	*Roadside delivery*	*Private boxes*	*Private and free bags*	*Poste restante(b)*
New South Wales	1,493,267	71,472	129,694	5,058	49,469
Victoria	1,084,126	49,674	80,369	3,881	36,184
Queensland	481,349	51,048	71,116	6,615	24,496
South Australia	354,515	2,821	45,773	4,227	19,025
Western Australia	302,743	8,456	37,611	795	18,058
Tasmania	94,137	6,895	14,272	1,229	11,666
Australia	**3,810,137**	**190,366**	**378,835**	**21,805**	**158,898**

(*a*) Statistics shown here are from the Mail Delivery Network Survey at 31 March 1975. (*b*) Delivery of mail at post offices.

Postal articles handled

The following two tables show the number of postal articles handled by the Australian Post Office, according to their State of origin. Each article is counted once only irrespective of the number of times it may be handled in transit.

POSTAL ARTICLES HANDLED(*a*): 1974–75

('000)

State	*Letters (b)*	*Newspapers and packets (c)*	*Parcels (d)*	*Registered articles (e)*	*Letters (b)*	*Newspapers and packets (c)*	*Parcels (d)*	*Registered articles (e)*
	Posted for delivery within Australia				*Posted for delivery overseas*			
New South Wales	756,976	127,427	9,645	2,409	43,784	8,826	368	1,162
Victoria	596,148	102,911	5,574	1,557	29,227	3,480	391	662
Queensland	287,025	36,678	2,450	1,033	9,746	771	98	88
South Australia	186,909	25,967	1,642	589	4,453	316	82	89
Western Australia	145,862	19,318	1,055	480	7,959	957	75	110
Tasmania	52,172	6,756	244	188	313	31	7	3
Australia	**2,025,091**	**319,051**	**20,609**	**6,256**	**95,482**	**14,381**	**1,020**	**2,113**
	Received from overseas				*Total postal matter dealt with*			
New South Wales	80,599	19,005	967	1,754	881,358	155,258	10,980	5,325
Victoria	50,196	11,547	752	845	675,571	117,938	6,716	3,064
Queensland	9,321	2,929	197	62	306,093	40,379	2,745	1,183
South Australia	6,569	2,288	110	36	197,931	28,571	1,834	714
Western Australia	6,166	4,184	176	97	159,986	24,459	1,307	687
Tasmania	107	265	57	2	52,592	7,052	308	193
Australia	**152,957**	**40,219**	**2,260**	**2,797**	**2,273,531**	**373,657**	**23,889**	**11,165**

(*a*) Number of distinct articles handled. (*b*) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (*c*) Includes newspapers and postal articles not included in letter mail. (*d*) Includes registered, cash on delivery and duty parcels. (*e*) Includes registered articles other than parcels.

POSTAL ARTICLES HANDLED(*a*): AUSTRALIA

('000)

Year	*Letters(b)*	*Newspapers and packets(c)*	*Parcels(d)*	*Registered articles(e)*	*Total postal articles handled*
1970–71	(*f*)2,436,846	(*f*)330,858	24,950	13,234	2,805,887
1971–72	2,429,041	300,981	24,574	12,166	2,766,762
1972–73	2,474,996	315,774	25,445	11,372	2,827,587
1973–74	(*g*)2,459,155	(*g*)321,814	25,336	11,722	2,818,026
1974–75	2,273,531	373,657	23,889	11,165	2,682,242

(*a*) Number of distinct articles handled. (*b*) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (*c*) Includes newspapers and postal articles not included in letter mail. (*d*) Includes registered, cash on delivery and duty parcels. (*e*) Includes registered articles other than parcels. (*f*) Comparable only with previous year. (*g*) Not comparable with previous years.

During 1974–75 the cost of the carriage of mails, as disclosed by the Profit and Loss Statement of the Postal Service, was as follows: road, $23,276,872; railway, $3,710,173; sea, $1,281,731; air—internal, $3,005,869; overseas, $10,939,833; total, $42,214,478.

MONEY ORDERS AND POSTAL ORDERS: TRANSACTIONS, AUSTRALIA

Year	*Money orders(a)*			*Postal orders*		
	Issued		*Total commission received*	*Issued*		
	Number	*Value*		*Number*	*Value*	*Fee*
	'000	$'000	$'000	'000	$'000	$'000
1970–71	7,353	161,119	3,031	(*b*)16,732	44,961	1,193
1971–72	5,677	143,167	2,808	17,289	55,784	1,779
1972–73	5,151	144,896	2,807	16,787	57,475	1,903
1973–74	4,774	154,442	2,948	15,822	60,887	2,000
1974–75	4,521	182,668	3,308	14,547	60,566	2,353

(*a*) Money orders issued for payment in Australia and overseas. (*b*) Postal orders for $9 and $10 were introduced in October 1970.

Of the total money orders issued in Australia during 1974–75, 4,160,686 valued at $177,022,610 were payable in Australia, and 360,750 valued at $5,645,455 were payable overseas. Of the total money orders paid in Australia during 1974–75, 4,315,557 ($175,690,854) were issued in Australia, and 153,480 ($4,197,950) were issued overseas.

Of the total postal orders paid in Australia during 1974–75 (14,546,590 valued at $60,566,045), 11,106,681 ($47,791,232) were paid in the State in which issued, and 3,493,317 ($12,484,618) were paid in States other than those in which issued.

Internal telecommunication services

A brief history of the development of telecommunications in Australia is shown on pages 378–82 of Official Year Book No. 59. Common internal telecommunication operations now comprise telephone, telegram and telex services.

Wire and pole routes

At 30 June 1975 there were 26,099,754 pair kilometres of cable and 733,825 pair kilometres of aerial wire used for telecommunication purposes in Australia. The aerial wires are mounted on 152,903 kilometres of pole routes.

Coaxial cable and broadband relay systems

In recent years trunk telephone, telegraph and television channels have been increasingly provided by coaxial cable and radio relay systems. Broadband radio relay systems and coaxial cables are an alternative means of providing transmission facilities, each radio bearer being similar in carrying capacity to a coaxial tube. At 30 June 1975 there were 31,774 tube kilometres of coaxial cable and 114,145 bearer kilometres of radio relays in operation.

Telephone services in operation

Increasing use of the telephone by the community has resulted in a demand for additional telephone services. The volume of internal telephone traffic has consistently expanded, trunk line calls having the fastest rate of growth.

The following table shows the number of services in operation in each State at 30 June 1975 classified according to type of service, type of exchange to which connected, and location. Telephone services connected to exchanges within 24.1 km of the Sydney and Melbourne General Post Offices, and 16.1 km of the Brisbane, Adelaide, Perth and Hobart General Post Offices are defined as being within a metropolitan area. Telephone services connected to exchanges located between 24.1 km and 40.2 km of the Sydney and Melbourne General Post Offices and between 16.1 km and 32.2 km of Brisbane, Adelaide, Perth and Hobart General Post Offices are defined as being within an outer metropolitan area.

Definitions of terms used in the following table

Ordinary exchange services are services which provide direct access to the exchange system by means of exclusive use of an exchange line.

Duplex services provide for two subscribers sharing a single exchange line, and preserve individual calling, separate metering and secrecy conditions. Duplex services are counted as two services.

Party line services are other shared services involving any number of subscribers, and are counted as one service for one exchange line.

Private branch exchange services are services which provide for any number of extension lines to operate through a switchboard (either automatic or manual) into the exchange system. The relevant figure is the number of exchange lines (as distinct from extension lines). A service with six exchange lines and fifty extension lines is shown as six services.

Public telephones are telephones installed in public thoroughfares and other approved places for the use of the public generally (leased company coin telephones and 'red phones' are not included).

TELEPHONE SERVICES IN OPERATION: 30 JUNE 1975

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
Type of service—							
Ordinary exchange services	1,205,025	956,470	399,529	270,036	226,550	87,371	3,144,981
Duplex services	4	..	2	2	2	2	12
Party line services	2,925	702	2,427	870	725	47	7,696
Private branch exchange services	141,930	96,993	37,920	37,818	32,510	6,366	353,537
Public telephones	12,933	7,800	5,193	3,078	2,683	1,107	32,794
Connected to—							
Automatic exchanges	1,311,804	1,033,757	404,925	294,968	254,067	93,394	3,392,915
Manual exchanges	51,013	28,208	40,146	16,836	8,403	1,499	146,105
Located in—							
Metropolitan areas	876,912	785,845	242,887	229,139	198,127	42,066	2,374,976
Country areas	485,905	276,120	202,184	82,665	64,343	52,827	1,164,044
Total	**1,362,817**	**1,061,965**	**445,071**	**311,804**	**262,470**	**94,893**	**3,539,020**

TELEPHONE SERVICES IN OPERATION: AUSTRALIA

	30 June—				
Services connected to—	*1971*	*1972*	*1973*	*1974*	*1975*
Metropolitan exchanges—					
Automatic	1,754,872	1,822,722	1,903,589	2,014,817	2,109,006
Country exchanges—					
Automatic	859,202	949,227	1,060,328	1,179,800	1,283,597
Manual	242,936	205,818	183,153	166,409	146,417
All exchanges—					
Automatic	2,614,074	2,771,949	2,963,917	3,194,617	3,392,603
Manual	242,936	205,818	183,153	166,409	146,417
Total services	**2,857,010**	**2,977,767**	**3,147,070**	**3,361,026**	**3,539,020**

Telephone instruments

TELEPHONE INSTRUMENTS IN SERVICE ('000)

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1971	1,683	1,240	475	360	285	109	4,152
1972	1,814	1,294	498	377	304	113	4,400
1973	1,913	1,370	532	399	326	118	4,659
1974	2,055	1,485	553	429	352	126	5,000
1975	2,150	1,544	616	447	377	133	5,267
Number at 30 June 1975 per 100 population	43.2	42.0	30.8	33.5	33.5	32.7	39.0

Internal telephone traffic

LOCAL AND TRUNK LINE TELEPHONE CALLS: AUSTRALIA

Year	*Effective paid local calls*		*Trunk line calls*		
	Total '000	*Per service number*	*Total* '000	*Per service number*	*Total calls* '000
1970–71	2,848,000	1,024	225,300	81	3,073,300
1971–72	2,996,000	1,024	248,700	85	3,244,700
1972–73	3,146,000	1,027	276,300	90	3,422,300
1973–74	3,357,000	1,032	312,200	96	3,669,200
1974–75	3,560,000	1,032	345,000	100	3,905,000

Subscriber trunk dialling (S.T.D.) facilities were introduced during the year 1961–62 from Canberra to the Sydney network and from Warragul (Victoria) to Melbourne. At the end of June 1975 subscriber trunk dialling was in operation at 2,933 exchanges, connected to approximately 3,272,231 services.

Internal telegram traffic

Telegrams can be lodged at any post office, telephone office or from any public telephone equipped for multi-coin operation. In addition, telegrams can be despatched from any subscriber's telephone or telex service. The number of telegrams of various types transmitted within Australia is set out below.

INTERNAL TELEGRAM TRAFFIC: AUSTRALIA
('000)

Year	*Ordinary (a)*	*Urgent*	*Press*	*Letter-grams*	*Meteoro-logical service*	*Service*	*Total telegrams*
1970–71	16,265	436	63	23	1,099	765	18,651
1971–72	15,401	397	51	20	1,085	781	17,735
1972–73	15,588	489	43	13	1,126	780	18,037
1973–74	15,664	467	14	18	1,004	834	18,002
1974–75	13,775	355	..	23	1,065	875	16,093

(a) Includes radiograms.

Telex network

Particulars of the operations of the telex network, which are additional to the telegraph traffic shown above, are as follows:

TELEX NETWORK SERVICES AND INTERNAL CALLS, AUSTRALIA

Year	*Services at end of year*	*Internal calls during year*
1970–71	7,988	14,246,157
1971–72	9,235	15,868,800
1972–73	10,774	17,992,780
1973–74	12,857	21,489,560
1974–75	14,766	24,994,052

Development of telecommunications in Australia

An article dealing with the development of telecommunications in Australia appeared in Year Book No. 59, pages 378–84.

Overseas telecommunication services

The Overseas Telecommunications Commission (Australia) is the authority responsible for the establishment, maintenance and operation of telecommunication services between Australia and other countries, with ships at sea and to and between Australia's external Territories.

The Commission was established under the *Overseas Telecommunications Act* 1946. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunications services of the British Commonwealth countries concerned. (Details of overseas communication systems operating in Australia prior to 1946 and developments leading to the establishment of the Commission were published in Year Book No. 37, pages 220–4.)

With most other Commonwealth countries, the Commission is a member of the Commonwealth Telecommunications Organisation, the purpose of which is to promote the efficient exploitation and development of the Commonwealth external telecommunications system; it is a three-tier structure comprising the Commonwealth Conference on Telecommunications, the Commonwealth Telecommunications Council and the Commonwealth Telecommunications Bureau. The Commonwealth Telecommunications Council is the continuing management body of the Organisation with the role of promoting the purpose of the Organisation and carrying out the policies agreed by Governments. The Commonwealth Telecommunications Bureau is the Secretariat for the Organisation and functions under the control and direction of the Council.

The 1972 Commonwealth Telecommunications Conference reviewed the working of the Commonwealth Telecommunications Organisation in the light of experience and recommended new collaborative financial arrangements governing the use of the Commonwealth telecommunications systems. With the adoption of the recommendations of the 1972 Conference by member Governments, the Commonwealth Telecommunications Organisation Financial Agreement 1969 was replaced on 1 April 1973 by the Commonwealth Telecommunications Organisation Financial Agreement 1973.

In association with the Australian Telecommunications Commission within Australia and with communication carriers in other Commonwealth and foreign countries the Commission provides public message telegram, telephone, telex, phototelegram, leased circuit and switched data services to most countries and places throughout the world. International television programs are provided by means of satellite communication facilities with countries operating earth stations.

The Commission, in partnership with the overseas telecommunications authorities of Britain, Canada and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand and Canada via Suva and Honolulu. The cable (COMPAC) was opened in December 1963 and forms part of a British Commonwealth large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a microwave system. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The South-East Asia cable project (SEACOM), extending the large capacity telephone cable system from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Kota Kinabalu, was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of Britain, Canada, Australia, New Zealand, Malaysia and Singapore, administers COMPAC and SEACOM.

The Commission is a joint partner with the New Zealand Post Office in a 640 circuit telephone cable (TASMAN) between Australia and New Zealand which was opened for service in February 1976; and has acquired an interest in 845 circuit submarine cables jointly owned with the American and Japanese international carriers linking U.S. Mainland, Hawaii, Guam and Japan and which were completed in January 1976. The Commission is also a joint partner with the Papua New Guinea Posts and Telegraphs service in the provision of a 640 circuit submarine cable to be known as A–PNG between Cairns and Port Moresby, scheduled to enter service around July 1976.

In August 1964, Australia became a foundation member of the International Telecommunications Satellite Organisation (INTELSAT), a partnership of nations which has established a global communications satellite system. During 1976 Australia had an ownership share of 2.94 per cent making it the eighth largest shareholder among the 93 INTELSAT member countries. Through the Commission Australia is represented on the INTELSAT Board of Governors which is the management board of INTELSAT.

The Interim Agreements under which INTELSAT had operated in the period since 1964 were superseded in February 1973 by permanent arrangements, which are embodied in two inter-related Agreements. The first, an inter-governmental agreement signed by the Commonwealth Government, outlines the principles and objectives of the organisation and defines the basic organisational arrangements. The second, the Operating Agreement, signed by the Commission as the designated Australian signatory, provides the basis for the operation and management of the INTELSAT organisation.

The INTELSAT system comprises satellites located over the Atlantic, Pacific and Indian oceans. At the beginning of 1976 these satellites were providing the equivalent of 7,000 two-way telephone circuits and on demand television service between 104 earth stations located in 71 countries.

In March 1968, a satellite earth station at Moree, New South Wales, owned and operated by the Commission, commenced commercial communications, including a capability for television transmission/reception. This station, which operates to the Pacific Ocean INTELSAT satellite positioned in a stationary orbit 35,900 kilometres above the equator, was the first in Australia constructed as a 'standard' station of the INTELSAT network.

The completion of earth stations at Carnarvon (Western Australia) which operates to the Pacific Ocean INTELSAT satellite, and Ceduna (South Australia), which works to the Indian Ocean satellite, in 1969 and a significant expansion of facilities at the earth station at Moree provided increased telecommunications services via satellite. At the beginning of 1976 circuits provided by these stations provided more than half of Australia's total international telecommunications links.

The original smaller station at Carnarvon (opened in 1967) is now used solely for tracking, telemetry, command and monitoring functions under contract with the INTELSAT organisation. There is provision for four such stations to be spaced around the world so that any INTELSAT satellite can be viewed and controlled no matter where it may be. These stations keep a continuous check of the position of each satellite and its functions by means of signals transmitted by the satellite. When required, signals are transmitted to a satellite to control the direction of its antenna and to change its orbital position. During launches, these stations transmit the commands which fire the satellite motor to place it in final orbit, and during 1975 Carnarvon participated in the launch of the INTELSAT satellites which were placed in orbit over the Atlantic and Indian Oceans.

International telecommunication traffic

Particulars of the volume of international telegraph services, originating and terminating in Australia, during the years ended 31 March 1974 and 1975 are shown in the following table.

INTERNATIONAL TELEGRAPH SERVICES: AUSTRALIA, YEARS ENDED 31 MARCH 1974 AND 1975

('000 words)

	Words transmitted					
	From Australia		*To Australia*		*Total*	
Class of traffic	*1973–74*	*1974–75*	*1973–74*	*1974–75*	*1973–74*	*1974–75*
Letter	36,494	35,214	28,484	27,737	64,978	62,951
Ordinary	32,741	30,089	28,988	26,861	61,729	56,950
Press	1,944	1,814	1,854	1,062	3,798	2,876
Greetings	1,608	1,434	2,000	2,010	3,608	3,444
Urgent	2,322	2,311	1,648	1,365	3,970	3,676
Other	531	569	2,380	2,044	2,911	2,613
Total	**75,640**	**71,431**	**65,354**	**61,079**	**140,994**	**132,510**

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the years ended 31 March 1974 and 1975.

INTERNATIONAL TELECOMMUNICATION SERVICES OTHER THAN TELEGRAPHIC SERVICES: AUSTRALIA, YEARS ENDED 31 MARCH 1974 AND 1975

		Transmissions					
		From Australia		*To Australia*		*Total*	
Service		*1973–74*	*1974–75*	*1973–74*	*1974–75*	*1973–74*	*1974–75*
Telephone	'000 paid minutes	12,108	16,143	13,359	18,152	25,467	34,295
Telex	'000 paid minutes	6,444	8,280	6,101	8,076	12,545	16,356
Television programs	paid minutes	1,008	2,741	4,401	3,982	5,409	6,723

Coastal stations

The Overseas Telecommunications Commission operates fourteen coastal radio stations at points around the Australian coast, and one at Norfolk Island. During the year ended 31 March 1975 the coastal radio service handled 6,780,000 paid words to ships and 4,262,000 words from ships. Ship calls over the radiotelephone service extended over 218,000 paid minutes.

Radiocommunication stations authorised

At 30 June 1975 there were 222,087 civil radiocommunication stations authorised for operation in Australia and its Territories. Of these, 5,627 were stations established at fixed locations, 18,704 were land stations which were established at fixed locations for communication with mobile stations, 17 space and broadcasting stations, 190,886 were mobile stations and 6,853 amateur stations. Particulars of broadcasting stations are shown on page 417.

BROADCASTING AND TELEVISION

Broadcasting and television services in Australia operate under the *Broadcasting and Television Act* 1942 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service, and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board. Licence fees for commercial broadcasting and television stations are payable under the *Broadcasting Stations Licence Fees Act* 1964 and the *Television Stations Licences Fees Act* 1964 respectively.

Particulars of the composition, functions and responsibilities of the Australian Broadcasting Control Board are shown in the Twenty-seventh Annual Report for the year ended 30 June 1975.

Broadcasting services

The National Broadcasting Service

In sound broadcasting the programs of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department.

Technical facilities. At 30 June 1975 the National Broadcasting Service comprised ninety-one transmitting stations, of which eighty-five were medium frequency and six high frequency.

The medium-frequency transmitters operate in the broadcast band 530 to 1,590 kilohertz. The high-frequency stations, using frequencies within the band of three to thirty megahertz, provide services to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland.

Many of the programs provided by country stations are relayed from the capital cities, high-quality program transmission lines being used for the purpose. A number of program channels are utilised to link national broadcasting stations in the capital cities of Australia, and when necessary, this system is extended to connect both the national and commercial broadcasting stations.

At 30 June 1975 seventy-one of the Australian medium-frequency stations were situated outside the six State capital cities.

Program facilities. The programs of the Australian Broadcasting Commission cover a wide range of activities. The proportion of broadcasting time allocated on metropolitan stations to the various types of program during 1974–75 was as follows: classical music 25.5 per cent; entertainment 32.1 per cent; news 8.3 per cent; sporting 5.7 per cent; light music 1.5 per cent; spoken word 7.2 per cent; drama and features 3.8 per cent; education 3.0 per cent; parliament 6.0 per cent; religious 2.8 per cent; young people's programs 1.2 per cent; rural 1.9 per cent; and presentation 1.0 per cent. Further particulars of the operations of the Australian Broadcasting Commission in respect of music, drama and features, youth education, talks, rural broadcasts, news, and other activities are shown in the Forty-third Annual Report of the Australian Broadcasting Commission.

The Commercial Broadcasting Service

Commercial broadcasting stations are operated under licences granted and renewed by the Minister for Post and Telecommunications after taking into consideration any recommendations which have been made by the Broadcasting Control Board. The initial period of a licence is five years and renewals are granted for a period of one year.

The fee payable for a licence is $200 on the grant of the licence, and thereafter $200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Broadcasting Stations Licence Fees Act* 1964, during the preceding financial year—1 per cent up to $500,000; 1.5 per cent $500,001 to $1,000,000; 2 per cent $1,000,001 to $1,500,000; 2.5 per cent $1,500,001 to $2,000,000; 3 per cent $2,000,001 to $2,500,000; 3.5 per cent $2,500,001 to $3,000,000; 4 per cent $3,000,001 to $3,500,000; and 4.5 per cent over $3,500,000.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton and two at Lyndhurst, Victoria, and one at Brisbane, Queensland, which provide the overseas service known as 'Radio Australia'. As in the case of the National Broadcasting Service, these stations are maintained and operated by the Australian Telecommunications Commission, and their programs are arranged by the A.B.C. The programs, which give news and information about Australia presented objectively, as well as entertainment, are directed mainly to South-East Asia and the Pacific. The overseas audience has grown very substanially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

Broadcasting stations

BROADCASTING STATIONS: 30 JUNE 1975

Type of station	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
National—									
Medium frequency	21	6	20	10	17	4	5	2	85
High frequency	1	2	2	..	1	..	..	..	6
Overseas (high frequency)	..	9	1	..	..	..	..	..	10
Commercial (medium frequency)	39	20	26	8	14	8	2	1	118
Total	**61**	**37**	**49**	**18**	**32**	**12**	**7**	**3**	**219**

Broadcast listeners' and television viewers licences

As from 17 September 1974 all requirements for broadcast listeners' and television viewers' licences fees were abolished. For details of licences *see* Year Book, No. 60.

Television services

The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department. The first national station (ABN Sydney) commenced regular transmission on 5 November 1956. At 30 June 1975 eighty-four stations were operating, excluding fifty-two translator stations.

The television programs provided by the Australian Broadcasting Commission cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30 June 1975 were as follows: drama, 18.4 per cent; public interest, 12.9 per cent; sporting, 17 per cent; news, 6.2 per cent; variety and acts, 6.7 per cent; education, 25.3 per cent; musical performances, 1.1 per cent; religious, 1.5 per cent; rural, 0.4 per cent; special acts and aesthetics, 2.3 per cent; cartoons, 1.5 per cent; panel and quiz games, 0.2 per cent; and presentation, 6.5 per cent. The average weekly transmission time for the eighty-four national television transmitters was eighty-six hours during the year ended 30 June 1975.

The Commercial Television Service

Commercial television stations are operated under licences granted and renewed by the Minister for Post and Telecommunications. The first commercial station (TCN Sydney) commenced regular transmission on 16 September 1956. At 30 June 1975 forty-eight television stations were operating.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is $200 for the first year and thereafter $200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Television Stations Licence Fees Act* 1964, during the preceding financial year—1 per cent up to $1,000,000; 2 per cent $1,000,001 to $2,000,000; 3 per cent $2,000,001 to $4,000,000; and 4 per cent over $4,000,000.

Colour television

Colour television services commenced officially in Australia on 1 March 1975.

Television stations

During the year ended 30 June 1975, twelve new national television stations commenced regular transmission, namely ABAQ Channel 8, Alpha; ABBQ Channel 10, Barcaldine; ABBLQ Channel 9, Blackall; ABCTQ Channel 10, Clermont; ABJQ Channel 6, Longreach; ABSEQ Channel 9, Springsure; ABWNQ Channel 8, Winton in Queensland; ABEW Channel 10, Esperance; ABMW Channel 10, Moora; ABCMW Channel 8, Morawa in Western Australia; ABKD Channel 7, Katherine; and ABTD Channel 9, Tennant Creek in the Northern Territory. Eight new television translator stations went into operation, six for the national service and two commercial service.

Ten remote communities are now provided with A.B.C. programs from tape recorded at Townsville and Perth. The following table shows the number of television stations in operation at 30 June 1975.

TELEVISION STATIONS: 30 JUNE 1975

Type of station and location	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
National—									
Metropolitan	1	1	1	1	1	1	1	1	8
Country	13	7	31	5	15	2	3	..	76
Total, National	*14*	*8*	*32*	*6*	*16*	*3*	*4*	*1*	*84*
Commercial—									
Metropolitan	3	3	3	3	2	1	1	1	17
Country	11	6	8	2	3	1	..	..	31
Total, Commercial	*14*	*9*	*11*	*5*	*5*	*2*	*1*	*1*	*48*
All stations	**28**	**17**	**43**	**11**	**21**	**5**	**5**	**2**	**132**

CHAPTER 13

SOCIAL SECURITY AND WELFARE SERVICES

This chapter describes social welfare services provided by the Commonwealth Government (through the Departments of Social Security and Aboriginal Affairs), the State Governments and voluntary welfare organisations. Details of services administered by the Commonwealth Departments of Health and Veterans' Affairs are given in the Public Health and Repatriation chapters respectively. For information on the many important welfare services provided by the State and local governments, especially in the fields of child and Aboriginal welfare, reference should be made to the State Year Books and annual statistical bulletins and the annual reports of the State departments concerned. Details on pension and superannuation schemes for government and semi-government employees, mine workers, parliamentarians, and employees of private business are included in the chapter Private Finance.

Further information on subjects dealt with in this chapter is included in the annual bulletins *Australian National Accounts* (7.1); *Public Authority Finance: Federal Authorities* (5.12); *Public Authority Finance: State and Local Government Authorities* (5.43); *Public Authority Finance: State Governments; Social Services* (5.37); *Public Authority Finance: Outlay on Aboriginal Affairs by Federal Authorities* (5.42) *Social Indicators* (13.16). Current and summarised information on Commonwealth Government social services is contained in the *Monthly Review of Business Statistics* (1.4).

Commonwealth Government expenditure on social security services

This section deals with various government payments for the relief of the aged, indigent, infirm, widowed, orphaned and unemployed, assistance to families, etc. For summary statements of cash payments to persons made by public authorities under various functional heads, *see Public Authority Finance* and other annual bulletins mentioned above.

AUTHORITIES OF THE COMMONWEALTH GOVERNMENT, SOCIAL SECURITY CASH BENEFITS TO PERSONS, 1974-75

($'000)

	N.S.W. (a)	*Vic.*	*Qld*	*S.A. (a)*	*W.A.*	*Tas.*	*N.T. (a)*	*A.C.T. (a)*	*Abroad*	*Total*
Assistance to aged persons—										
Age pensions	600,206	432,555	247,122	158,657	118,492	50,226	..	117	5,077	1,612,451
Delivered meals	359	114	148	172	115	60	..	..	..	968
Personal care	1,921	2,283	1,191	1,107	883	266	..	..	..	7,651
Telephone concessions	2,710	2,084	877	654	509	219	..	..	..	7,053
Total	*605,196*	*437,036*	*249,338*	*160,590*	*119,999*	*50,771*	..	*117*	*5,077*	*1,628,123*
Assistance to incapacitated and handicapped persons—										
Invalid pensions	127,034	68,190	49,088	30,195	20,320	9,893	..	24	1,735	306,477
Sheltered employment allowances	1,484	..	31	944	575	41	..	..	..	3,075
Handicapped children's benefits	1,017	444	330	275	309	94	..	..	..	2,469
Rehabilitation services	2,581	3,248	1,234	982	908	369	..	..	6	9,329
Total	*132,116*	*71,882*	*50,683*	*32,396*	*22,112*	*10,397*	..	*24*	*1,741*	*321,350*
Assistance to unemployed and sick persons—										
Unemployment benefits	93,760	66,361	42,422	20,475	19,753	7,746	752	470	..	251,740
Sickness benefits	24,395	18,193	8,596	4,855	4,415	1,692	188	498	..	62,833
Special benefits	4,281	2,560	1,746	735	777	422	422	50	..	10,992
Structural adjustment assistance	21,552	22,427	2,516	2,790	252	1,503	..	..	..	51,040
Other	7	1	6	1	2	2	..	..	..	20
Total	*143,995*	*109,542*	*55,286*	*28,856*	*25,199*	*11,365*	*1,362*	*1,018*	..	*376,625*
Assistance to ex-servicemen(*b*)—										
War and service pensions and allowances	165,767	124,014	78,823	41,715	36,995	20,376	..	334	1,885	469,908
Other benefits(*c*)	..	..	..	..	..	..	..	..	..	4,254
Total	*165,767*	*124,014*	*78,823*	*41,715*	*36,995*	*20,376*	..	*334*	*1,885*	*474,162*
Assistance to widowed and deserted spouses—										
Widows' pensions	87,955	66,474	33,325	25,193	18,459	8,521	..	29	1,435	241,389
Assistance to families and children—										
Child endowment	79,395	62,885	34,401	21,937	19,084	7,099	..	9	39	224,848
Maternity allowances	2,767	1,978	1,177	695	659	229	..	..	1	7,506
Supporting mothers' benefits	26,473	15,786	13,505	9,293	8,102	2,819	..	9	104	76,092
Orphans' pensions	601	291	223	146	76	43	..	..	..	1,381
Total	*109,236*	*80,940*	*49,306*	*32,071*	*27,921*	*10,190*	..	*18*	*144*	*309,827*

For footnotes *see* end of table

AUTHORITIES OF THE COMMONWEALTH GOVERNMENT, SOCIAL SECURITY CASH BENEFITS TO PERSONS, 1974-75—*continued*

($'000)

	N.S.W. (a)	*Vic.*	*Qld*	*S.A. (a)*	*W.A.*	*Tas.*	*N.T. (a)*	*A.C.T. (a)*	*Abroad*	*Total*
Other social security and welfare programs—										
Funeral benefits	647	417	260	159	112	44	..	..	2	1,641
Telephone rental concessions n.e.c.	455	374	190	115	112	53	..	..	..	1,299
Compassionate allowances	18	24	41	6	2	2	..	1	2	95
Assistance to homeless persons	..	..	..	..	..	..	..	275	..	275
Other(*c*)	..	..	..	..	..	..	..	..	..	432
Total	*1,120*	*815*	*491*	*280*	*226*	*99*	..	*276*	*4*	*3,742*
Health benefits(*d*)	316,713	189,926	99,358	78,337	60,187	22,144	..	50,383	..	817,045
Total social security	**1,562,098**	**1,080,629**	**616,610**	**399,438**	**311,098**	**133,863**	**1,362**	**52,199**	**10,286**	**4,172,263**

(*a*) State totals for New South Wales and South Australia also include most of the unallocable expenditure on cash benefits to persons resident in the Australian Capital Territory and the Northern Territory respectively. (*b*) For details *see* Chapter 5, Repatriation. (*c*) Expenditures on this item are unallocable by States and are included in total only. (*d*) For details *see* Chapter 14, Public Health.

AUTHORITIES OF THE COMMONWEALTH GOVERNMENT, SOCIAL SECURITY CASH BENEFITS TO PERSONS

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Assistance to aged persons—					
Age pensions	582,889	680,322	887,750	1,146,387	1,612,451
Delivered meals	218	226	398	958	968
Personal care	1,592	1,830	3,273	4,949	7,651
Telephone concessions	2,955	3,806	4,172	5,394	7,053
Total	*587,654*	*186,184*	*895,593*	*1,157,688*	*1,628,123*
Assistance to incapacitated and handicapped persons—					
Invalid pensions	119,387	138,194	184,699	226,022	306,477
Sheltered employment allowances	590	742	1,161	1,418	3,075
Handicapped children's benefits	456	438	429	582	2,469
Rehabilitation services	3,107	3,945	4,658	6,203	9,329
Total	*123,540*	*143,319*	*190,947*	*234,225*	*321,350*
Assistance to unemployed and sick persons—					
Unemployment benefits	10,795	25,997	46,553	58,246	251,740
Sickness benefits	10,262	15,906	26,610	41,407	62,833
Special benefits	2,420	2,851	4,368	6,983	10,992
Structural adjustment assistance	..	..	..	..	51,040
Other	..	..	80	44	20
Total	*23,477*	*44,754*	*77,611*	*106,681*	*376,625*
Assistance to ex-servicemen(*a*)—					
War and service pensions and allowances	234,979	260,150	297,304	355,803	469,908
Other benefits	3,823	4,058	3,720	4,025	4,254
Total	*238,802*	*264,208*	*301,024*	*359,828*	*474,162*
Assistance to widowed and deserted spouses—					
Widows' pensions	90,514	104,627	140,505	180,957	241,389
Assistance to families and children—					
Child endowment	198,442	216,581	253,860	225,360	224,848
Maternity allowances	8,554	8,617	7,970	7,782	7,506
Supporting mothers' benefits	..	..	..	40,586	76,092
Orphans' pensions	..	..	..	458	1,381
Total	*206,996*	*225,198*	*261,860*	*274,186*	*309,827*
Other social security and welfare programs—					
Funeral benefits	1,653	1,583	1,579	1,578	1,641
Telephone rental concessions n.e.c.	662	802	863	1,024	1,299
Emergency assistance to wool-growers(*b*)	21,327	187	..	..	..
Compassionate allowances	91	98	104	104	95
Assistance to homeless persons	..	..	..	..	275
Other	137	132	134	378	432
Total	*23,870*	*2,802*	*2,680*	*3,084*	*3,742*
Health benefits(*c*)	409,480	508,133	581,283	659,003	817,045
Total social security	**1,704,333**	**1,979,225**	**2,451,473**	**2,975,651**	**4,172,263**

(*a*) For details *see* Chapter 5, Repatriation. (*b*) For details *see* Chapter 22, Rural Industry. (*c*) For details *see* Chapter 14, Public Health.

Commonwealth Government social services

Under the provisions of Section 51 of the Constitution, the Commonwealth Government is empowered to legislate on:

'(xxiii) Invalid and old age pensions:
'(xxiiiA) The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances;'.

On 1 July 1947 with the passage of the *Social Services Consolidation Act* 1947, all Acts providing social service benefits were amalgamated. The Act is at present styled the *Social Services Act* 1947.

The social security benefits provided by the Commonwealth Government under the *Social Services Act* 1947, and the date on which each came into operation, are:

Age pension	1 July 1909
Invalid pension	14 October 1910
Maternity allowance	10 October 1912
Child endowment	1 July 1941
Widow's pension and allowance for one child	30 June 1942
Funeral benefit	1 July 1943
Allowances for wife and one child of pensioners who are invalided	8 July 1943
Unemployment benefit	1 July 1945
Sickness benefit	1 July 1945
Special benefit	1 July 1945
Commonwealth Rehabilitation Service	10 December 1948
Additional pension for second and subsequent children of pensioners who are invalided	11 October 1956
Additional pension for second and subsequent children of widows' pensioners	16 October 1956
Supplementary assistance for rent-paying age and invalid pensioners	23 October 1958
Supplementary assistance for rent-paying widows' pensioners	28 October 1958
Mother's allowance for widows' pensioners with dependent children	8 October 1963
Student endowment	14 January 1964
Allowances for wife and one child of age pensioners who are not invalided	14 October 1965
Additional pension for second and subsequent children of age pensioners who are not invalided	14 October 1965
Guardians' allowances for widowed and other unmarried age and invalid pensioners with children in their care	14 October 1965
Sheltered employment allowance	30 June 1967
Training scheme for widow pensioners	27 September 1968
Special payments to the surviving spouse of a pensioner couple	10 October 1968
Additional pension for all children (i.e. allowance for one child converted to additional pension as for other children)	10 October 1968
Supplementary allowance for rent paying sickness beneficiaries after six weeks	28 September 1970
Wife's pension (superseded wife's allowance)	5 October 1972
Supporting mother's benefit (including mother's allowance and additional benefit for children)	3 July 1973
Double orphans' pension	9 October 1973
Incentive allowance for sheltered employees	1 November 1974
Handicapped child's allowance	30 December 1974

Age and invalid pensions and associated payments

Age pensions are payable to residentially qualified men and women who have reached the ages of 65 and 60 respectively. They are subject to a means test unless the person is permanently blind or has reached the age of 70. They are also subject to tax.

To be residentially qualified for age pension a person must generally be living in Australia on the date of application for the pension and have lived in Australia for ten years continuously at some time. If a person has completed five years, but not ten years, continuous residence at some time, and has lived in Australia for periods which exceed a total of ten years, the period of continuous residence otherwise required is reduced by the total of his periods of residence in Australia in excess of ten years. Any periods of absence during which a person's home remains in Australia, and absences in certain other circumstances, may be counted as residence, and any absence in an external Territory other than Norfolk Island, counts as residence in Australia. Residence in New Zealand or the United Kingdom may be treated as residence in Australia.

Invalid pensions are payable to persons, sixteen years of age and over, who are permanently incapacitated for work to the extent of at least eighty-five per cent, or permanently blind. They are subject to means test unless the person is permanently blind.

There is no residence qualification for invalid pension if the permanent blindness or incapacity occurred within Australia (including an external Territory other than Norfolk Island) or during temporary absence from Australia. As a result some people not residentially qualified for age pension but who have reached age pension age receive an invalid pension. Invalid pension is subject to tax in these cases but not in others.

A wife's pension is payable to the wife of a pensioner not entitled, in her own right, to an age, invalid or repatriation service pension. There is no residence qualification but a means test applies. Wife's pension is taxable only if her husband has reached the age of 65.

Rates of pension. The maximum standard rate was increased to $2,145 per annum ($41.25 a week) from 13 May 1976. This is payable to a single, widowed or divorced pensioner, or a married pensioner whose spouse is not receiving a pension or a tuberculosis allowance. The standard rate may also be paid to each of a married pensioner couple who are living apart for an indefinite period due to illness or infirmity of either or both. The maximum rate for a married pensioner couple (known as the married rate) was increased to $3,562 per annum ($68.50 a week) from 13 May 1976 (i.e. $1,781 per annum or $34.25 a week each). For a married person, whose spouse receives a tuberculosis allowance, or a service pension, the maximum rate is also $1,781 per annum ($34.25 a week).

Additional pension for each dependent child under 16 years is payable, subject to the means test, at the rate of up to $390 per annum ($7.50 a week). Widowed or other unmarried age or invalid pensioners with a dependent child may receive a guardian's allowance up to $4 a week, or up to $6 a week if the child is under 6 years of age or is an invalid child requiring full-time care. Guardian's allowance is also subject to the means test. Eligibility for the additional pension for children is extended to include a child over sixteen years, provided he is wholly or substantially dependent on the pensioner and is receiving full-time education at a school, college or university. Supplementary assistance of up to $5 a week (standard rate pensioners) and $2.50 a week (married rate pensioners) subject to a special means test, is available to pensioners if they pay rent or pay for board and lodging or for lodging.

On the death of one member of a married pensioner couple the surviving pensioner spouse becomes entitled to receive, for up to six fortnightly instalments, the equivalent of the two pensions that would have been paid if the spouse had not died. For the purpose of this provision the term 'pensioner' includes a person in receipt of age, invalid, wife's or repatriation service pension, or a sheltered employment allowance.

A table showing the maximum rates of pension operating since 1 July 1909 at dates prior to 14 October 1965 is included on page 608 of Year Book No. 51. Details of the respective rates and allowances payable since 14 October 1965 are included in subsequent Year Books.

The means test is the same for age and invalid pension purposes. As already noted, it does not apply to the permanently blind or, in the case of age pensions, to people who have reached 70 years of age. In other cases, the means test operates to reduce pension payable if a claimant's *means as assessed* —in effect, the claimant's annual income other than from property plus 10 per cent of the excess of the claimant's property over $400—exceed prescribed limits. In the case of a person entitled to the standard rate of pension, the limit is $1,040; in other cases, it is $897. If means as assessed exceed these figures, half the excess is subtracted from the appropriate maximum rate of pension. If means as assessed do not exceed these figures, the appropriate maximum rate is payable.

The effect of the means test is to preclude from entitlement to any pension a person subject to the means test and whose 'income' exceeds $102.50 a week or whose property exceeds $53,700 in value (these figures are both lower if the claimant has both income and property). The corresponding figures for a married couple without children are $85.75 a week and $45,000 (each partner).

Supplementary assistance is subject to a special means test, the effect of which is to reduce the maximum annual rate by the excess of a person's means as assessed over $52 (standard rate pensioner) or half the excess of means as assessed over $52 (married rate pensioners).

Certain types of income are exempted. The main exemptions are: income from property; gifts or allowances from children, parents, brothers, or sisters; benefits from friendly societies; child or student endowment; Commonwealth Government health benefits and amounts received from registered hospital or medical benefit organisations. The amount of a pensioner's income included in means as assessed may also be reduced by up to $312 per annum ($6 per week) for each dependent child under sixteen years or full-time student in the pensioner's care.

A special concession is made available to recipients of superannuation pensions and annuities, the annual rate of such payments being converted to a property equivalent for means test purposes by reference to a specific conversion factor. This conversion is to the pensioner's advantage in the majority of cases but where this is not so, the payments are treated as income.

Certain types of property are disregarded. They include the permanent home of the pensioner, furniture and personal effects, the surrender value (up to $1,500) of life insurance policies, the capital value of annuities or contingent interests, and the value of reversionary interests.

For the purposes of the means test, the means as assessed of a married person are normally taken to be half of the combined means as assessed of the married couple. Exceptions may be made where the spouses are legally separated or in other special circumstances.

AGE AND INVALID PENSIONS IN FORCE 30 JUNE 1975

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Age—									
Males	125,972	95,408	56,148	33,875	26,489	11,225	719	1,380	351,216
Females	276,398	205,431	110,306	73,404	53,342	23,044	981	3,103	746,009
Persons	**402,370**	**300,839**	**166,454**	**107,279**	**79,831**	**34,269**	**1,700**	**4,483**	**1,097,225**
Invalid(*a*)—									
Males	41,963	23,863	16,424	9,703	6,676	3,341	504	343	102,817
Females	26,965	14,394	11,040	6,645	4,285	2,119	295	224	65,967
Persons	**68,928**	**38,257**	**27,464**	**16,348**	**10,961**	**5,460**	**799**	**567**	**168,784**

(*a*) Includes recipients of sheltered employment allowance.

NEW PENSIONERS, BY SEX AND MARITAL STATUS: AUSTRALIA, 1974–75

	Age pensioners			*Invalid pensioners*		
Marital status	*Males*	*Females(a)*	*Persons(a)*	*Males*	*Females*	*Persons*
Single(*b*)	6,008	8,549	14,557	6,863	4,151	11,014
Married	42,682	37,475	80,157	14,912	3,330	18,242
Widowed	6,573	21,025	27,598	1,114	703	1,817
Divorced	1,027	1,307	2,334	840	481	1,321
Total	**56,290**	**68,356**	**124,646**	**23,729**	**8,665**	**32,394**

(*a*) Excludes transfers from wives' allowance to age pension. (*b*) Includes married but permanently separated.

The average age of new age pensioners was 69.9 years for men and 68.3 years for women.

NEW INVALID PENSIONERS, BY AGE GROUP: AUSTRALIA, 1974-75

		16–19 years	*20–44 years*	*45–59 years*	*60–64 years*	*65 years and over*	*Total*
Males .	number	1,225	3,502	10,229	8,242	531	23,729
Females .	number	1,151	2,614	4,632	159	109	8,665
Persons .	**number**	**2,376**	**6,116**	**14,861**	**8,401**	**640**	**32,394**
	Per cent	**7**	**19**	**46**	**26**	**2**	**100**

AGE AND INVALID PENSIONS: SUMMARY, AUSTRALIA

	Pensioners at end of year					*Average weekly pensions as at end of year*		
	Age				*Total payments during*			*Age and invalid combined*
Year	*Number*	*Rate(a)*	*Invalid(b)*	*Total*	*year(c)*	*Age(d)*	*Invalid (d)*	*(d)*
			No.	No.	$'000	$	$	$
1970–71 .	807,711	613	134,075	941,786	702,276	14.36	16.54	14.67
1971–72 .	832,693	620	138,818	971,511	818,517	16.38	18.98	16.75
1972–73 .	931,812	678	149,609	1,081,421	1,072,449	19.70	22.67	20.11
1973–74 .	1,027,582	729	156,783	1,184,365	1,372,409	23.99	26.73	24.35
1974–75 .	1,097,225	763	168,784	1,266,009	1,612,468	33.09	36.28	33.51

(*a*) Number of pensioners per 1,000 persons of pensionable age (males aged 65 years and over and females aged 60 years and over). (*b*) Includes recipients of sheltered employment allowance. (*c*) Includes allowances and supplementary assistance. (*d*) Includes supplementary assistance, additional pensions for children, and guardian's allowance, where applicable.

Sheltered employment allowance and associated payments

Sheltered employment allowance is payable to disabled people who are employed in sheltered workshops and are otherwise qualified to receive an invalid pension or would become so qualified if they ceased to be provided with sheltered employment. The allowance is subject to the same means test as applies to invalid pension and is paid at the same rate. It is payable in the form of a supplement to the sheltered employee's wages. The allowance is not taxable unless the sheltered employee has reached age pension age.

A sheltered employee is entitled to the same additional payments as an invalid pensioner except that no supplementary assistance is payable. Instead, all people in receipt of sheltered employment allowance receive an incentive allowance of $5 a week. There is no means test on the allowance but a person precluded by his or her means from receiving sheltered employment allowance is not entitled to incentive allowance.

In the year ended 30 June 1975, workshops were approved under the *Social Services Act* 1947 to pay sheltered employment allowances on behalf of the Department of Social Security. At 30 June 1975 sixty workshops were paying the allowances to 2,772 disabled employees. Employees in other sheltered workshops continued to receive invalid pensions. Expenditure during the year 1974–75 was $3,075,401.

Widows' pensions and associated payments

There are three categories of widowed pensioners—

Class '*A*'. A widow who has the custody, care and control of one or more qualifying children under the age of sixteen years or full-time dependent students;

Class '*B*'. A widow who, because she has no qualifying children or students in her custody, care and control, is not eligible for a Class 'A' widow's pension but is either at least 50 years of age or, after having reached the age of 45, has ceased to receive a Class 'A' pension by reason of ceasing to have the custody, care and control of a qualifying child or student; and

Class '*C*'. A widow not eligible for Class 'A' or Class 'B' widow's pension, is under 50 years of age but is in necessitous circumstances following her husband's death (in normal circumstances, the Class 'C' pension is not payable after 26 weeks have elapsed from the death of the husband but, if the widow is pregnant, the period is extended until the child's birth, whereupon the widow may then become eligible for a Class 'A' widow's pension).

For classes 'A' and 'B' the term 'widow' includes a wife who has been deserted by her husband for a period of at least six months; a divorcee; and a woman whose husband has been for at least six months in prison or in a mental hospital. A woman who, although not legally married, has been living with a man for at least three years as his wife on a *bona fide* domestic basis and subsequently loses her partner by reason of death, desertion or his imprisonment or admission to a mental hospital is treated as though she had been legally married to him.

A period of residence in Australia before claiming a pension is not required if a woman and her husband were residing permanently in Australia when she became a widow. In other circumstances, five years continuous residence preceding lodgment of the claim may be required, but this is waived in the case of a woman whose husband has died overseas if she has resided continuously in Australia for ten years at any time and returns to Australia to live.

A widow's pension is not payable to a woman receiving an age or invalid pension, a sheltered employment allowance, or a war widow's pension. A deserted wife or a divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband may be ineligible for a widow's pension.

Current rates of pension. With effect from 4 May 1976, the maximum rate of pension for all classes of widows is $2,145 per annum ($41.25 a week) plus, in the case of widows with children, mother's allowance of $208 per annum ($4 a week) or $312 per annum ($6 a week) where at least one child is under 6 or is an invalid requiring full-time care, plus $390 per annum ($7.50 a week) for each dependent child who is under 16 years or is a full-time dependent student. Supplementary assistance of up to $260 a year ($5 a week) is also available to widows who pay rent or pay for board and lodgings or for lodgings and who are wholly or substantially dependent on their pension. The amount of this assistance cannot exceed the amount of rent paid.

Widow's pension is subject to a means test but is not taxable if the recipient is under 60. If she is 60 years or more, the pension is taxable but mother's allowance, additional pension for children and supplementary assistance are not.

Means test. Widow's pensions are subject to a means test on income and property. The means test for widow pensions also applies to recipients of the supporting mother's benefit described below. The rate of pension payable in any case depends on the claimant's *means as assessed.* When calculating the means as assessed of a claimant for Class 'A' widow's pension or supporting mother's benefit no amount in respect of property is taken into account where the value of the widow's or supporting mother's property is $4,500 or less. If the value of property exceeds $4,500 the woman's total assets or property are equated with income by treating each complete $20 of assets above $2,000 as equivalent to an income of $2 a year. This amount is the property component. Means as assessed may consist entirely of the property component, entirely of income, or of various combinations of the property component and income. As for age and invalid pensions some types of income and property are disregarded for purposes of calculating means as assessed. The method for calculating the means as assessed of a claimant for Class 'B' widow's pension is the same as for single, widowed or divorced claimants for age or invalid pension (*see* page 422). For Classes 'A' and 'B' widows and supporting mothers annual maximum standard rate of pension plus any additional allowances are reduced by half of the amount of any means as assessed in excess of $1,040. There is no specific means test for the Class 'C' pension, which is paid only where it is evident that a widow has insufficient means of support. Supplementary assistance is reduced by the amount by which *means as assessed* exceed $52.

The average age of new widow pensioners admitted during 1974–75 was: Class 'A', 36.3 years; Class 'B', 56.6 years; Class 'C', 42.7 years; and for all classes, 44.6 years.

It should be noted that deserted wives ineligible for Class 'A' or Class 'B' widow's pension because six months have not expired from the date of desertion by the husband may be eligible for assistance from the Government of the State in which she lives. The Commonwealth Government subsidises the the State Governments for this purpose under the States Grants (Deserted Wives) Act. It also assists deserted wives in the Territories during the first six months after desertion.

WIDOWS' PENSIONS: 1974-75

	Number admitted —all classes (a)	*Pensions current at end of year*				*Average weekly pension at end of year (b)*	*Amount paid in pensions during year (b) (c)*
		Class 'A'	*Class 'B'*	*Class 'C'*	*All classes*		
						$	$'000
New South Wales	9,184	24,554	19,143	40	43,737	44.84	86,252
Victoria	6,793	19,164	14,876	16	34,056	44.67	66,474
Queensland	2,751	8,302	7,809	9	16,120	45.76	33,325
South Australia	1,731	6,154	5,662	6	11,822	43.99	23,873
Western Australia	2,362	4,930	4,493	19	9,442	44.37	18,459
Tasmania	707	2,481	1,616	6	4,103	46.88	8,521
Northern Territory	124	381	259	..	640	49.53	1,320
Australian Capital Territory	194	552	319	..	871	44.72	1,702
Abroad	..	(d)	(d)	(d)	(d)	..	1,465
Total	**23,846**	**66,518**	**54,177**	**96**	**120,791**	**44.89**	**241,392**

(a) Excludes transfers from one class to another. (b) Includes supplementary assistance and allowances. (c) Includes payments to benevolent homes for maintenance of pensioners. (d) Included in the figures for the State or Territory in which the pensioner is normally domiciled.

WIDOWS' PENSIONS: SUMMARY, AUSTRALIA

Year	*Number admitted —all classes (a)*	*Pensions current at end of year*				*Average weekly pension at end of year (b)*	*Amount paid in pensions during year (b) (c)*
		Class 'A'	*Class 'B'*	*Class 'C'*	*All classes*		
						$	$'000
1970–71	18,223	47,146	43,157	96	90,399	19.72	90,514
1971–72	19,413	49,811	42,893	80	92,784	23.31	104,627
1972–73	28,275	57,872	47,768	77	105,717	28.28	140,505
1973–74	25,458	64,084	51,137	89	115,310	32.79	180,957
1974–75	23,846	66,518	54,177	96	120,791	44.89	241,392

(a) Excludes transfers from one class to another. (b) Includes supplementary assistance and allowances. (c) Includes payments to benevolent homes for maintenance of pensioners.

For details of training scheme for widow pensioners, *see* page 435.

Supporting mother's benefit

Supporting mother's benefit is for unmarried mothers, mothers who are deserted de facto wives, de facto wives of prisoners, or separated wives. The benefit becomes payable six months after the date of the event giving rise to eligibility (e.g. six months after the date of birth of a child, or six months after the date of separation). A supporting mother is qualified to receive a benefit if she is residing in Australia on the date on which she lodges her claim for the benefit and, if unmarried, the child was born while she was residing in Australia; or, in the case of a married woman living apart from her husband, she was residing in Australia immediately before they commenced to live apart; or, in the case of a deserted de facto wife or the de facto wife of a prisoner, if she was residing in Australia immediately before the de facto relationship ceased; or if a woman has been continuously resident in Australia for not less than five years immediately preceding the date on which she lodged a claim for the benefit. To be eligible for the benefit a woman must be supporting an eligible child under the age of 16 years, or an older dependent full-time student. The rate of supporting mother's benefit, including mother's allowance and payments for children, is the same as for Class 'A' widow's pension.

It should be noted that a woman ineligible for supporting mother's benefit because six months have not expired from the date of the event otherwise giving rise to eligibility may be entitled in the meantime to assistance from the Government of the State in which she lives. The Commonwealth Government subsidises the States for this purpose under the States Grants (Deserted Wives) Act. If the woman is living in one of the Territories, the Commonwealth Government may make assistance available in the first six months after desertion.

Fringe benefits

The Commonwealth Government makes available to pensioners (and in certain cases, recipients of supporting mother's benefits) several 'fringe benefits'. In most cases these are subject to a special means test. These benefits include—

a one-third reduction in telephone rental (this is available to the blind without a means test). The costs for 1974–75 were $7,052,656 for concessions and $192,639 for administering the scheme:

a 50 per cent reduction in fares for Commonwealth Government railway and shipping services:
certain postal concessions;
a 10 per cent discount on book purchases from Commonwealth Government bookshops (this is available free of means test);
free hearing aids;
the availability without charge of certain pharmaceutical prescriptions;
free optometrical consultations; and
additional nursing home benefits.

State Governments, local government authorities and private organizations also provide certain fringe benefits. The most valuable of these are reductions in local government rates and in public transport charges.

The means test operates on the basis of means as assessed as defined for pension purposes. A standard-rate pensioner whose means as assessed are less than $1,716 qualifies for those fringe benefits subject to the means test. A married-rate pensioner qualifies if their means as assessed are less than $1495.

Funeral benefits

A benefit of up to $40 is payable to an eligible age, invalid, wife or widow pensioner who is liable for the funeral costs of another such deceased pensioner, a deceased child or a deceased spouse; a benefit of up to $20 is payable to any (other) person liable for the funeral costs of a deceased age or invalid pensioner in respect of whose burial a funeral benefit may be granted. These benefits are subject to the 'fringe benefits' means test, applied in the first case, to the person liable for the funeral costs and, in both cases, to the means of the deceased pensioner or beneficiary (where relevant) prior to his or her death.

FUNERAL BENEFITS GRANTED
(Number)

State, Territory, etc.	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales	22,430	20,802	20,854	20,418	21,772
Victoria	14,881	13,973	13,782	13,939	14,184
Queensland	8,505	8,046	8,168	8,219	8,797
South Australia	4,937	4,976	4,918	4,909	5,164
Western Australia	3,741	3,649	3,470	3,386	3,769
Tasmania	1,408	1,474	1,424	1,497	1,494
Northern Territory	8	7	12	21	17
Australian Capital Territory	175	178	175	178	256
Abroad	3	8	. .	n.a.	n.a.
Total	**56,088**	**53,113**	**52,803**	**52,567**	**55,453**

Total cost of funeral benefits granted during 1974–75 was $1,640,595.

Portability of social service payment

Age, invalid and widows' pensions, and supporting mother's benefits, continue in force for recipients who have left Australia unless they left before 8 May 1973 or their pension or benefit is subject to the provisions of either of the reciprocal agreements with New Zealand or the United Kingdom. In certain cases of hardship, the pension or benefit may continue for people who left before 8 May 1973.

Maternity allowances

A maternity allowance is payable to a woman who gives birth to a child if she resides, or intends to reside permanently in Australia and gives birth to the child in Australia, and to a woman who gives birth to a child while travelling to Australia if she intends to reside permanently in Australia, provided she receives no benefit similar to a maternity allowance from the country from which she came. A woman who gives birth to a child during a temporary absence from Australia may also be eligible. An alien mother may receive the allowance if she or her husband resided in Australia for at least twelve months immediately prior to the birth of the child, or if she is likely to remain in Australia permanently. Payment may be made in respect of the birth of a still-born child, or a child who lives for less than twelve hours, if at least five and a half months had elapsed from the date of conception.

Rates of allowance. The allowance is $30 if the mother has no other children under sixteen, $32 if she has one or two other children under sixteen, and $35 if she has three or more other children under sixteen. In the case of multiple births the allowance is increased by $10 for each additional child born. An advance payment of $20 may be made four weeks before the expected date of birth. The balance is payable immediately after the birth.

MATERNITY ALLOWANCES: CLAIMS PAID AT EACH RATE 1974–75

(Number)

				Multiple births							
	Single births			*Twins*			*Triplets*			*Other*	*Total claims paid*
	$30	*$32*	*$35*	*$40*	*$42*	*$45*	*$50*	*$52*	*$55*	*$62*	
New South Wales . .	33,514	41,677	7,506	342	457	102	4	9	..	..	83,611
Victoria	24,298	32,260	5,784	221	318	67	4	3	..	..	62,955
Queensland . . .	14,668	18,142	4,398	102	191	55	1	4	1	..	37,562
South Australia . . .	8,433	10,012	1,414	59	104	17	1	1	..	..	20,041
Western Australia . .	8,243	10,579	1,868	77	106	28	2	2	..	1	20,906
Tasmania	2,839	3,611	699	23	44	9	..	..	..	..	7,225
Northen Territory . .	796	967	390	5	7	4	..	..	..	..	2,169
Australian Capital Territory	1,574	2,109	324	17	17	2	..	..	..	..	4,043
Abroad	15	8	3	..	..	..	..	..	..	..	26
Total	**94,380**	**119,365**	**22,386**	**846**	**1,244**	**284**	**12**	**19**	**1**	**1**	**238.538**

MATERNITY ALLOWANCES: CLAIMS PAID, AUSTRALIA

	Claims paid			
Year	*Single births*	*Multiple births*	*Total*	*Amount paid*
				$'000
1970–71	267,235	2,817	270,052	8,554
1971–72	269,148	2,858	272,006	8,617
1972–73	249,340	2,544	251,884	7,970
1973–74	243,375	2,527	245,902	7,782
1974–75	236,131	2,407	238,538	7,506

Child and student endowment

A person who is resident in Australia and has the custody, care, and control, of one or more children under the age of sixteen years or of a full-time student child sixteen or more but under twenty-one years, or an approved institution of which children are inmates, is qualified to recieve an endowment in respect of each such child. Full-time student children are those receiving full-time education at a school, college or university and who are not in employment or engaged in work on their own account. There are provisions to meet cases of families divided because of divorce, separation, unemployment or death of a parent. There is no means test.

Twelve months residence in Australia is required if the claimant and the child were not born here, but this requirement is waived if the Department of Social Security is satisfied that they are likely to remain in Australia permanently. Where the child's father is not a British subject, endowment is payable if the child was born in Australia, if the mother is a British subject, or if the Department is satisfied that the child is likely to remain permanently in Australia. Under certain conditions, endowment may be paid to Australians who are temporarily absent overseas.

Rates of endowment. Since 12 October 1971 the weekly rates have been: children under sixteen years—50 cents for the first or only child; $1.00 for the second; $2.00 for the third; and then increases of 25 cents for each subsequent child, making $2.25 for the fourth, $2.50 for the fifth and so on.

For each eligible student child sixteen or more but under twenty-one years the rate is $1.50 a week. The rate payable for each child under sixteen years in an approved institution is $2.00 a week. For changes in the rates introduced in 1976 *see* Appendix.

Number of claims and endowed children—children under sixteen years. The number of families receiving child endowment at 30 June 1975 in respect of children under sixteen years was 1,915,818, an increase of 26,748 or 1.42 per cent during the year.

CHILD ENDOWMENT: CLAIMS AND ENDOWED CHILDREN UNDER 16 YEARS 30 JUNE 1975

	Family groups			*Approved institutions*		
		Endowed children under 16 years				
State, Territory, etc.	*Claims in force*	*Number*	*Average number per claim*	*Number (a)*	*Endowed child inmates under 16 years*	*Total endowed children under 16 years*
New South Wales	668,471	1,369,618	2.05	149	5,541	1,375,159
Victoria	525,211	1,100,830	2.10	128	4,651	1,105,481
Queensland	280,174	608,871	2.17	47	1,829	610,700
South Australia	178,978	364,047	2.03	68	1,045	365,092
Western Australia	162,198	345,272	2.13	72	4,430	349,702
Tasmania	58,970	126,461	2.14	23	399	126,860
Northern Territory	12,021	28,295	2.35	24	286	28,581
Australian Capital Territory	29,678	62,912	2.12	2	13	62,925
Abroad	117	241	2.06	..	..	241
Total	**1,915,818**	**4,006,547**	**2.09**	**513**	**18,194**	**4,024,741**

(*a*) All institutions approved for receipt of endowment.

The following table shows, as at 30 June 1975, the number of claims in force and the number of endowed children under sixteen years in family groups, classified according to the number of endowed children in the family group. The families included in the table are not necessarily made up entirely of the children of one marriage, but may include step-children, foster children, adopted children, and any other children in the custody, care and control of the claimant.

CHILD ENDOWMENT: ENDOWED CHILDREN UNDER 16 YEARS IN FAMILY GROUPS TOTAL, 30 JUNE 1975

Number of endowed children under 16 years in family group	*Claims in force*	*Endowed children under 16 years*	*Number of endowed children under 16 years in family group*	*Claims in force*	*Endowed children under 16 years*
1	658,786	658,786	9	584	5,256
2	710,240	1,420,480	10	194	1,940
3	354,010	1,062,030	11	64	704
4	131,397	525,588	12	24	288
5	40,091	200,455	13	6	78
6	13,834	83,004	14	1	14
7	4,800	33,600	15 or more	3	52
8	1,784	14.272	Total	**1,915,818**	**4,006,547**

CHILD ENDOWMENT: CLAIMS AND ENDOWED STUDENT CHILDREN 30 JUNE 1975

	Family groups			Approved institutions		
		Endowed student children				
State, Territory, etc.	Claims in force	Number	Average number per claim	Number(a)	Endowed student child inmates	Total endowed student children
New South Wales	79,464	88,461	1.11	22	157	88,618
Victoria	75,296	85,581	1.14	32	104	85,685
Queensland	25,470	28,417	1.12	9	124	28,541
South Australia	22,823	25,625	1.12	18	150	25,775
Western Australia	16,767	18,797	1.12	21	127	18,924
Tasmania	5,335	5,890	1.10	4	4	5,894
Northern Territory	581	645	1.11	9	7	652
Australian Capital Territory	4,019	4,667	1.16	..	..	4,667
Abroad	14	19	1.36	..	..	19
Total	**229,769**	**258,102**	**1.12**	**115**	**673**	**258,775**

(a) Included with approved institutions in first table on page 429.

CHILD ENDOWMENT: ENDOWED STUDENT CHILDREN IN FAMILY GROUPS TOTAL, 30 JUNE 1975

Number of endowed student children in family group	Claims in force	Endowed student children	Number of endowed student children in family group	Claims in force	Endowed student children
1	203,223	203,223	4	87	348
2	24,853	49,706	5 or more	3	16
3	1,603	4,809	**Total**	**229,769**	**258,102**

CHILD ENDOWMENT: CHILDREN UNDER 16 YEARS LIABILITY AND EXPENDITURE, 1974-75

($'000)

	Annual liability at 30 June 1975			
State, Territory, etc.	Family groups	Approved institutions	Total	Total payments to endowees and institutions during year(a)
New South Wales	69,772	576	70,348	68,638
Victoria	57,044	484	57,528	56,129
Queensland	32,849	190	33,039	32,180
South Australia	18,225	109	18,334	18,285
Western Australia	17,999	461	18,460	17,625
Tasmania	6,696	41	6,737	6,610
Northern Territory	1,654	30	1,684	1,663
Australian Capital Territory	3,236	1	3,237	3,052
Abroad	12	..	12	(b)48
Total	**207,488**	**1,892**	**209,380**	**204,230**

(a) *See* footnote (*b*) to summary table below. (*b*) Includes expenditure for endowed student children; separate figures are not available.

CHILD ENDOWMENT: STUDENT CHILDREN, LIABILITY, AND EXPENDITURE, 1974-75

($'000)

State, Territory, etc.	Annual liability at 30 June 1975			Total payments to enaowees and institutions during year
	Family groups	Approved institutions	Total	
New South Wales	6,900	12	6,912	7,345
Victoria	6,675	8	6,683	6,756
Queensland	2,217	10	2,227	2,221
South Australia	1,999	12	2,011	1,953
Western Australia	1,466	10	1,476	1,460
Tasmania	459	. .	459	489
Northern Territory	50	1	51	37
Australian Capital Territory	364	. .	364	360
Abroad	1	. .	1	(*a*)
Total	**20,132**	**52**	**20,184**	**20,620**

(*a*) Included in preceding table showing expenditure for endowed children under sixteen years; separate figures are not available.

CHILD ENDOWMENT: SUMMARY, AUSTRALIA

	At end of year					
	Family group claims in force					
Year	For children under 16 years(*a*)	For student children(*a*)	Approved institutions	Total endowed children	Annual liability for endowment (*b*)	Total payments during year (*b*)
					$'000	$'000
1970–71	1,797,628	196,999	469	4,155,930	207,499	198,467
1971–72	1,843,478	209,466	485	4,234,500	234,972	216,610
1972–73	1,870,638	202,768	505	4,238,882	232,207	(*c*)253,890
1973–74	1,189,070	216,490	511	4,260,739	231,093	225,392
1974–75	1,915,818	229,769	513	4,283,516	229,564	224,850

(*a*) Claims by families with children under sixteen and student children are shown in both columns. Information on the number of families having such dual claims is not available. (*b*) A number of endowments are paid every twelve weeks. During two years out of every three there are four such payments but every third year there are five. Figures for annual liability therefore, reflect trends in expenditure on child endowment more accurately than do figures for payments. (*c*) Expenditure for this year includes five twelve-weekly payments for endowed children under 16 years.

Double orphan's pension

This pension is payable to the guardian of a child both of whose parents or adoptive parents are dead, or one of whom is dead and the other missing. It is also payable in cases where one parent is dead and the other is a long-term inmate of a prison or mental hospital. Payment is made for orphans who are under 16 years or who are full-time students under 21. There is no means test. The pension is payable at the rate of $10 a week for each eligible child. A double orphan's pension is not payable if the child attracts a war orphan's pension under the Repatriation Act.

Handicapped child's allowance

Parents or guardians of a child under 16 years who is severely handicapped mentally and/or physically, is living in the family home, and needs constant care and attention, are entitled to a handicapped child's allowance. The allowance is not subject to any means test. The rate of the allowance is $10 a week. A residence qualification similar to that for child endowment applies to the allowance.

Unemployment and sickness benefits and associated payments

Unemployment and sickness benefits are paid to men over sixteen and under sixty-five years of age, and women over sixteen and under sixty years of age, who are unemployed or who are temporarily incapacitated for work and thereby suffer loss of income. They must have been living in Australia during the preceding twelve months or be likely to remain permanently in Australia. Both benefits are subject to an income test. A person cannot receive both benefits simultaneously, nor can a person receive either benefit at the same time as an invalid, widow's or repatriation service pension.

For unemployment benefit purposes, a person must establish that he is unemployed, that his unemployment is not due to his being a direct participant in a strike, that he is capable and willing to undertake suitable work, and that he has taken reasonable steps to obtain such work. Registration for employment with the District Employment Office of the Commonwealth Employment Service is necessary. For sickness benefit purposes, a person must establish that he is temporarily incapacitated for work because of sickness or accident and that he has thereby suffered a loss of salary, wages or other income. A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where her husband is able to maintain her only partially, a benefit may be paid at such rate as is considered reasonable in the circumstances.

Rates of Benefit. The maximum weekly rates of unemployment and sickness benefit payable, and the permissible income in respect of benefit periods which commenced after the introduction of increased benefits in May 1976, are as follows:—

	Maximum weekly rate $	*Permissible weekly income* $
Married man (includes additional benefit for wife)	68.50	6.00
Single person aged 21 years or more	41.25	6.00
Single person aged 18 to 20 years	41.25	3.00
Single person aged 16 or 17 years	36.00	3.00
A person aged under 21 years who does not have a parent living in Australia	36.00	6.00

These amounts should be increased by $7.50 for each child under 16 years, or a full-time student in the care of the beneficiary.

After the benefit has been paid for six consecutive weeks a beneficiary who is paying rent, or is paying for lodgings, may be entitled to supplementary allowance of up to $5.00 a week. The amount of any such allowance cannot exceed the amount of rent paid.

The weekly rate of benefit is reduced by the amount by which a beneficiary's other income exceeds the amount of permissible income. For unemployment benefit purposes the income of the spouse is also taken into account unless the claimant and his spouse are permanently separated. The income of the spouse of a sickness beneficiary affects only the assessment of additional benefit to which the beneficiary may be entitled for the spouse. For sickness benefit purposes the income from an approved friendly society, or other similar approved body, in respect of the incapacity for which sickness benefit is payable is disregarded. 'Income' does not include child endowment or other payments for children, health benefits and payments from Medibank or registered benefit organisations, or an amount paid in reinbursment of medical, dental or similar expenses. The supplementary allowance is reduced by the amount by which a beneficiary's other income exceeds $1.00 a week in the case of a single person and by half of the excess of the beneficiary's income over $2.00 a week in the case of a married person.

The amount of compensation, damages or similar payment, or war pension, if paid in respect of the same incapacity as that for which sickness benefit is claimed, is deducted from the sickness benefit if paid in respect of the same period. If not paid in respect of the same incapacity, compensation in respect of the same period is regarded as income and war pension is ignored.

There is a waiting period of seven days during which unemployment or sickness benefit is not usually payable, but this waiting period is not required to be served more than once in any period of thirteen weeks.

Special benefit

A special benefit may be granted to a person not qualified for unemployment or sickness benefit who is not receiving an age, invalid or widow's pension, a service pension or a tuberculosis allowance and who, because of age, physical or mental disability or domestic circumstances, or for any other reason, is unable to earn a sufficient livelihood for himself and his dependants. Recipients of special benefits include, among others, persons caring for invalid parents, and persons ineligible for a pension because of lack of residence qualifications.

Special benefits are also paid to immigrants who are in Commonwealth Government centres or hostels awaiting their first placement in employment in Australia. During this time they receive a short instruction in English and in Australian conditions to facilitate their assimilation into the community and employment.

No means test or residence requirement is laid down but there is an overriding requirement that a person must be suffering hardship to be granted a special benefit.

The maximum rate of special benefit is the same as for unemployment benefit.

UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS
1974-75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Number admitted to benefit during year—									
Unemployment—									
Males	173,532	121,980	94,442	42,794	48,521	15,106	1,362	1,851	499,588
Females	66,390	53,616	33,481	19,150	20,764	6,982	340	991	201,714
Persons	239,922	175,596	127,923	61,944	69,285	22,088	1,702	2,842	701,302
Sickness—									
Males	39,022	24,788	18,335	7,429	9,688	3,468	516	793	104,039
Females	11,086	6,781	4,253	1,882	2,316	676	73	271	27,338
Persons	50,108	31,569	22,588	9,311	12,004	4,144	589	1,064	131,377
Special—									
Ordinary—									
Males	1,242	789	1,151	151	318	236	13	5	3,905
Females	5,159	2,681	3,034	974	1,273	564	58	83	13,826
Persons	6,401	3,470	4,185	1,125	1,591	800	71	88	17,731
Immigrants—									
Persons	1,622	..	119	161	..	..	..	..	1,902
Total—									
Males(*a*)	**213,796**	**147,557**	**113,928**	**50,374**	**58,527**	**18,810**	**1,891**	**2,649**	**607,532**
Females(*a*)	**82,635**	**63,078**	**40,768**	**22,006**	**24,353**	**8,222**	**471**	**1,345**	**242,878**
Persons(*b*)	**298,053**	**210,635**	**154,815**	**72,541**	**82,880**	**27,032**	**2,362**	**3,994**	**852,312**
Persons on benefit at end of year—									
Unemployment—									
Males	39,090	31,033	18,805	9,313	6,802	2,717	136	128	108,024
Females	18,315	14,591	8,877	4,915	4,209	1,722	29	66	52,724
Persons	57,405	45,624	27,682	14,228	11,011	4,439	165	194	160,748
Sickness—									
Males	7,384	6,279	2,766	1,562	1,531	574	45	208	20,349
Females	2,055	1,618	620	345	319	108	10	54	5,129
Persons	9,439	7,897	3,386	1,907	1,850	682	55	262	25,478
Special—									
Ordinary—									
Males	529	359	193	69	92	100	2	4	1,348
Females	1,460	1,138	658	349	359	197	13	30	4,204
Persons	1,989	1,497	851	418	451	297	15	34	5.552
Immigrants—									
Persons	13	..	28	8	..	..	..	..	49
Total—									
Males(*a*)	**47,003**	**37,671**	**21,764**	**10,944**	**8 425**	**3,391**	**183**	**340**	**129,721**
Females(*a*)	**21,830**	**17,347**	**10,155**	**5,609**	**4,887**	**2,027**	**52**	**150**	**62,057**
Persons(*b*)	**68,846**	**55,018**	**31,947**	**16,561**	**13,312**	**5,418**	**235**	**490**	**191,827**
Benefits paid during year—									
Unemployment $'000	93,760	66,361	42,422	20,475	19,753	7,746	752	470	251,740
Sickness $'000	24,395	18,193	8,596	4,855	4,415	1,692	188	498	62,833
Special(*b*) $'000	4,281	2,560	1,745	735	776	421	422	50	10,992
Total benefits paid $'000	**122,436**	**87,114**	**52,764**	**26,065**	**24,945**	**9,860**	**1,362**	**1,018**	**325,565**

(*a*) Excludes immigrants in Government centres or hostels awaiting their first placement in employment in Australia. (*b*) Includes immigrants in the category described in footnote (*a*).

UNEMPLOYMENT, SICKNESS, AND SPECIAL BENEFITS: SUMMARY, AUSTRALIA

	Number admitted to benefit during year			*Average number of persons on benefit at end of each week*			*Amount paid in benefits*		
Year	*Unemployment*	*Sickness*	*Special (a)*	*Unemployment*	*Sickness*	*Special (a)*	*Unemployment*	*Sickness*	*Special (a)*
							$'000	$'000	$'000
1970–71	137,963	73,601	22,982	14,979	9,524	4,293	10,795	10,262	2,420
1971–72	255,417	83,879	18,147	29,110	11,927	3,968	25,997	15,906	2,851
1972–73	280,573	101,249	16,267	39,580	16,163	4,090	46,553	26,610	4,368
1973–74	229,231	118,190	16,698	34,148	20,655	4,480	58,246	41,407	6,983
1974–75	701,302	131,377	19,633	116,603	24,346	5,331	251,740	62,833	10,992

(*a*) Includes immigrants in Government centres or hostels awaiting their first placement in employment in Australia.

Appeals Tribunals

Appeals Tribunals were established in all States and in the Australian Capital Territory on 10 February 1975, and shortly afterwards in the Northern Territory. The purpose of the Tribunals is to provide an independent avenue of redress for people who feel aggrieved by decisions of the Department of Social Security, which administers payments made under the Social Services Act. Each Tribunal consists of two independent members, usually a lawyer and a welfare worker, and a seconded officer from the Department of Social Security. The Tribunals operate as informally as possible. Appeals may be lodged by personal attendance, telephone, letter or on a special form.

The Tribunals do not have the power themselves to overturn decisions by the Department of Social Security but they make recommendations to the Department.

Reciprocal social services agreements with other countries

New Zealand. An agreement between the Governments of Australia and New Zealand for reciprocity in social services came into operation on 3 September 1943 and was amended from 1 July 1949. The reciprocal arrangements cover age and invalid pensions, widow's pensions, child endowment, and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence. Residence in one country may be treated as residence in the other country in relation to entitlement to benefits in which a residential qualification applies. Persons from one country taking up a permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country. Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

United Kingdom. Under a reciprocal agreement on social services between the United Kingdom and Australia residence in one country may be treated as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies. Australians going to the United Kingdom for permanent residence are treated in the United Kingdom as if they have been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits. There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

Commonwealth Rehabilitation Service

The Commonwealth Rehabilitation Service assists people who are unable to work because of long-term disability or who have had to give up their employment because of sickness or injury. It aims to help disabled people to reach their maximum physical, mental and social usefulness and to prepare them for suitable employment. Towards this aim, it provides co-ordinated programs of treatment and training to meet the special needs of each disabled person. Responsibility for the delivery of these services rests with the eleven residential and day-attendance centres and the thirteen regional rehabilitation units which are currently operated by the service.

Rehabilitation may be provided free to people receiving, or eligible to receive, invalid or widow's pension, or unemployment, sickness or special benefit, to people receiving tuberculosis allowance, to people aged 14 or 15 years who, without treatment or training, would be likely to qualify for invalid pension at age 16, to national servicemen and members of the permanent forces who are disabled at time of discharge but are ineligible for rehabilitation assistance from the Department of Veteran's Affairs, and to people who became disabled while working for the Commonwealth Government and are covered by the Compensation (Commonwealth Employees) Act, 1971. People from these groups may be selected for rehabilitation if their disabilities are a substantial handicap for employment but can be overcome by treatment or training, and if there are reasonable prospects that they will be able to take up employment following rehabilitation. Disabled people who do not qualify for the free service may pay for rehabilitation themselves and provision is made for charges to be reduced in accordance with each person's capacity to pay. Private or Government organisations may also sponsor rehabilitees.

For people receiving free rehabilitation, payment of pension or benefit continues during treatment. When vocational training begins, pension or benefit is suspended and replaced by training allowance. This allowance is based on the adult male average award wage adjusted quarterly. Living-away-from-home allowance is paid where necessary. Fares and living expenses (including those of an attendant where required) in connection with treatment, training or attendance for an interview or for medical examination may also be paid. Necessary artificial replacements, surgical aids and appliances may be provided, free of charge, to a person receiving treatment and training or who needs them to assist him to engage in a suitable vocation after the discontinuance of his treatment and training or who needs them otherwise to assist in his rehabilitation.

Vocational training is given to the people at the rehabilitation centres by occupational therapists, vocational counsellors and qualified trade and commerce teachers who assess and train each person in the skills which make best use of ability and which are best adapted to the employment situation.

In addition to the services provided at each centre, technical schools, business colleges, universities, training on-the-job in commerce or industry and correspondence courses are all used for training purposes. Text books and equipment may be provided during treatment or training; alternatively these may be supplied after treatment or training is discontinued to enable a rehabilitee to engage in employment. If supplied after treatment or training is discontinued the rehabilitee must meet the cost, but payment can be made by instalments.

Throughout the process of rehabilitation, vocational rehabilitation counsellors maintain contact with the disabled person and provide guidance and encouragement where necessary. The Commonwealth Rehabilitation Service currently employs 70 such counsellors who play a significant role in the co-ordination of the non-medical aspects of rehabilitation.

Since its inception in 1948 the Rehabilitation Service had been able to assist some 44,000 severely handicapped people, including over 31,000 who were able to undertake—or return to—gainful employment.

Numbers dealt with by the service.

REHABILITATION SERVICE: AUSTRALIA, 1974-75

Category	Accepted for treatment and training	Provided with vocational training		Placed in employment		Expenditure(a) $'000
		Commenced	Completed	After training	Without training	
Invalid pensioners	374	151	86	75	102	n.a.
Unemployment, sickness and special beneficiaries	1,501	404	248	187	581	
People whose rehabilitation is continued under Sections 135P or provided under 135S of the Social Services Act(b)	304	19	13	16	208	
People aged 14–15 years	93	16	10	10	41	
Other	12	4	3	..	4	
Total	**2,284**	**594**	**360**	**288**	**936**	**9,329**

(a) Excludes capital expenditure by the Department of Construction on sites and buildings and administrative costs of the Rehabilitation Service and Central Administration. (b) Persons receiving invalid pensions, etc., when accepted for rehabilitation and who, on becoming ineligible for the pension, etc., are provided with rehabilitation on payment of the cost by themselves; or cases sponsored from the outset by themselves or an authority.

REHABILITATION SERVICE, 1974–75

State	Number accepted for rehabilitation				Number placed in employment				Expenditure(a)
	Invalid pensioners	Unemployment sickness and special beneficiaries	Other	Total	Invalid pensioners	Unemployment sickness and special beneficiaries	Other	Total	$'000
New South Wales	111	237	113	461	45	112	55	212	2,581
Victoria	93	486	69	648	51	237	51	339	3,248
Queensland	71	269	100	440	35	146	105	286	1,234
South Australia	46	225	48	319	24	107	40	171	982
Western Australia	34	179	72	285	13	91	26	130	914
Tasmania	19	105	7	131	9	75	2	86	370
Total	**374**	**1,501**	**409**	**2,284**	**177**	**768**	**279**	**1,224**	**9,329**

(a) Excludes capital expenditure by the Department of Construction on sites and buildings and administrative costs of the Rehabilitation Service and Central Office.

Training scheme for widow pensioners

The Training Scheme for Widow Pensioners (T.S.W.P.) which helps widow pensioners and supporting mothers to acquire a vocational skill to enable them to undertake full or part-time employment was incorporated into the new National Employment and Training System (N.E.A.T.) which commenced on 1 October 1974.

Widow pensioners undergoing training with the T.S.W.P. were informed of the transfer to the N.E.A.T. system but where it appeared that a widow pensioner would be disadvantaged from transfer to N.E.A.T., arrangements were made to allow trainees to complete their training under T.S.W.P.

Of the 869 applications received during 1974–75, 716 were accepted. Seven hundred and nineteen widow pensioners and supporting mothers commenced training, 1164 completed training and 621 were placed in employment. Expenditure during the year was $862,794.

Compassionate allowances

These allowances are paid by the Commonwealth Government on a discretionary basis to certain people who are unable to qualify for pensions or other benefits under provisions of the Social Services Act. Expenditure on compassionate allowances and payments of a similar nature during 1974–75 was $96,911.

Commonwealth Government assistance to welfare organisations

The Aged or Disabled Persons Homes Act 1954 is designed to encourage the provision of homes in which aged persons may reside in conditions approaching normal domestic life.

To be eligible for assistance under the Act an organisation must be:

(*a*) carried on otherwise than for the purposes of profit or gain to the individual members; and
(*b*) a religious organisation, an organisation of which the principal objects or purposes are charitable or benevolent, an organisation of former members of the defence forces established in every State or a State branch of such an organisation, an organisation approved by the Governor-General for the purposes of the Act, or a local governing body.

An organisation conducted or controlled by, or by persons appointed by, the Australian or any State Government is not eligible for assistance under the Act.

The Director-General of the Department of Social Security may make a grant of money to an organisation as assistance towards meeting the cost of the construction or purchase of a home, including land, to be used permanently for the accommodation of aged persons. The grant is made on a basis of $4 for each $1 raised by the organisation but is limited to $9,360 for a single unit of accommodation and $10,920 for a double unit plus up to $1,920 per unit for land. Money which the organisation received from a governmental body other than a local governing body does not attract subsidy.

Before a grant is made the Director-General must be satisfied that the sum of the money expended and the money at present available for expenditure by the organisation towards the capital cost of the home, together with the amount of the grant, will be not less than the capital cost of the home.

The following table gives information regarding grants approved during 1974–75. The amounts granted include new grants approved in 1974–75 together with adjustments made during the year in respect of grants originally approved in earlier years.

AGED OR DISABLED PERSONS HOMES: GRANTS AND AMOUNTS APPROVED AND BEDS PROVIDED, 1974–75

	Grants approved		*Beds provided and type of accommodation*			
State	*Number*	*Amount ($'000)*	*Self-contained*	*Hostel*	*Nursing*	*Total*
New South Wales	68	10,028	679	59	423	1,161
Victoria	45	7,743	456	173	117	746
Queensland	29	4,711	102	140	240	482
South Australia	34	5,632	312	120	118	550
Western Australia	32	7,431	511	183	96	790
Tasmania	19	1,525	157	..	−2	155
Northern Territory	..	..	..	..	..	..
Australian Capital Territory	1	227	26	..	..	26
Total	**228**	**37,299**	**2,243**	**675**	**992**	**3,910**

The following table gives information regarding grants approved for each of the past five years. The amounts granted in each year include new grants approved in that year together with adjustments made during the year in respect of grants originally approved in earlier years.

AGED OR DISABLED PERSONS HOMES: GRANTS AND AMOUNTS APPROVED, AND BEDS PROVIDED AUSTRALIA

	Grants approved		*Beds provided*
Year	*Number*	*Amount* ($'000)	*Number*
1970–71	235	18,972	4,136
1971–72	241	23,792	4,760
1972–73	228	19,741	3,989
1973–74	171	18,999	3,417
1974–75	228	37,299	3,910

Since the commencement of the Act in December 1954, 3,138 grants amounting to $224,801,401 have been approved, and accommodation has been provided for 56,134 aged and disabled persons.

The Aged or Disabled Persons Homes Act also provides a *personal care subsidy* of $15 a week for persons of eighty years of age or over who receive approved personal care while living in hostel type accommodation provided by organisations eligible under the Aged or Disabled Persons Homes Act. The following table gives details of the premises approved, payments made and number of residents aged eighty years or over residing in the approved premises.

AGED OR DISABLED PERSONS HOMES ACT, PERSONAL CARE SUBSIDIES, 30 JUNE 1975

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Approved premises	No.	122	128	74	57	52	19	2	2	456
Residents qualifying	No.	2,855	3,245	1,807	1,586	1,267	367	8	21	11,156
Percentage of qualifying residents to total residents		50.40	64.86	51.80	65.00	67.00	73.40	40.00	40.00	58.07
Subsidies paid, 1974–75	$'000	1,907	2,283	1,191	1,101	883	266	7	14	7,651

The *Aged Persons Hostels Act* 1972 was introduced to stimulate the provision of more hostel-type accommodation for needy aged people.

Under the scheme the Commonwealth Government will meet the full cost of providing new hostel accommodation for two aged people for every one at present in an eligible unsubsidised home, or for one additional person for every two in a home previously subsidised on a dollar-for-dollar basis between 1954 and 1957. The organisation will not be required to make any contribution from its own resources unless the capital cost exceeds $11,700 per person accommodated, or the bed capacity of the new home exceeds the number of 'free' beds to which the organisation is entitled. A further grant of up to $250 for each person accommodated is available for furnishing the new hostel.

The new scheme is limited to a period of three years expiring on 27 September 1975 to encourage organisations to move quickly in taking advantage of the benefits the scheme offers.

This Act also has the effect of placing the old established organisations, which conducted homes prior to the introduction of the $2 for $1 scheme, in the same relative position as that achieved by newer organisations which have received a $2 for $1 subsidy, i.e. where two-thirds of their accommodation will have been provided by the Government.

Admission to these homes is based strictly on need with regard to the applicant's health, age, accommodation and financial situation. Since the commencement of the Act, 148 grants have been approved, totalling $58,742,166.

AGED PERSONS HOSTELS ACT GRANTS, 1974–75

		Persons accommodated			*Amount*		
	No. of grants	*Hostel beds*	*Staff beds*	*Total beds*	*Capital grants ($'000)*	*Furnishings grants ($'000)*	*Total grants ($'000)*
New South Wales	36	1,505	47	1,552	19,722	396	20,118
Victoria	21	501	26	527	6,570	127	6,697
Queensland	16	775	19	794	9,432	199	9,631
South Australia	3	28	1	29	745	7	753
Western Australia	4	93	9	102	1,315	26	1,341
Tasmania	1	23	1	24	335	6	341
Northern Territory	..	..	..	..	..	..	..
Australian Capital Territory	..	..	..	..	..	..	..
Total	**81**	**2,925**	**103**	**3,028**	**38,120**	**760**	**38,880**

Introduction of the *Handicapped Persons Assistance Act* has greatly extended the scope of Commonwealth Government assistance available to non-profit organisations providing approved services for physically and mentally handicapped people. The Act came into operation in December 1974, and repealed both the *Sheltered Employment (Assistance) Act* 1967 and the *Handicapped Children (Assistance) Act* 1970. Under the new legislation approved organisations may apply for a wide range of subsidy towards the cost of providing capital projects, maintenance and equipment in respect of sheltered workshops, activity therapy centres, training centres, residential accommodation and holiday homes. Grants are also available in respect of rental paid for premises and the salary payments to approved staff employed in the provision of the prescribed services.

Grants on purchases of buildings, equipment etc. take the form of a $4 subsidy for each $1 raised by an eligible organisation from non-government sources. Rent is subsidised at a rate equal to 80 per cent of the approved rental paid subject to certain conditions. Salary costs may be subsidised to an amount equal to 100 per cent of salary paid to staff employed in new ventures but this is reduced to 50 per cent after the premises have been providing the service for 2 years or more.

As well as assisting organisations with establishment and running costs, the legislation also provides financial encouragement to sheltered workshop administrators to provide the type of training for the handicapped which will prepare them, where possible, for open employment. A *training fee* of $500 is paid to organisations providing approved sheltered employment for each handicapped employee who, having received at least 6 months training in the workshop, graduates to open employment and remains there for at least 12 months.

Introduction of the Handicapped Persons Assistance Act in December 1974 also saw the transfer of the administration of Handicapped Childrens' Benefit from the Commonwealth Department of Health to the Department of Social Security. Where an organisation provides approved residential accommodation for mentally or physically handicapped children under 16 years it becomes entitled to receive a Commonwealth benefit of $3.50 per day in respect of each resident child. This payment replaces that previously paid under Division 5A of Part V of the National Health Act 1953.

The following table gives number of premises and grants approved during 1974–75 financial year in each State.

HANDICAPPED PERSONS ASSISTANCE ACT(*a*): GRANTS APPROVED 1974-75

		Capital grants(c)		*Other grants(d)*		*Total all grants*		
State	*No. of approved premises(b)*	*No. of grants*	*Amount approved*	*No. of grants*	*Amount approved*	*No. of grants*	*Amount approved*	*Expenditure*
			$		$		$	$
New South Wales	233	711	2,910,769	572	1,093,749	1,283	4,004,518	4,851,351
Victoria	140	274	1,740,918	499	1,166,907	773	2,907,825	2,455,666
Queensland	98	359	849,002	269	450,079	628	1,299,081	1,774,007
South Australia	36	170	967,662	368	778,154	538	1,745,816	3,917,454
Western Australia	34	213	238,826	193	469,746	406	708,572	1,199,400
Tasmania	18	62	623,066	90	173,440	152	796,506	735,932
Total	**559**	**1,789**	**7,330,243**	**1,991**	**4,132,075**	**3,780**	**11,462,318**	**14,933,810**

(*a*) Includes Sheltered Employment (Assistance) Act and Handicapped Children (Assistance) Act both repealed December 1974. (*b*) Total approved sheltered workshops activity therapy centres and training centres as at 30 June 1975. (*c*) Residential and non residential buildings, equipment and maintenance. (*d*) Training fee, salary subsidy and rent.

Grants approved under the Handicapped Children's (Assistance) Act and the Sheltered Employment (Assistance) Act in 1973–74 numbered 672 and 987 respectively amounting to $5,544,320 and $3,776,020.

HANDICAPPED CHILDREN'S BENEFIT

State	*Number of approved handicapped persons homes(a)*	*Estimated number of handicapped children accommodated (a)*	*Number of days benefit paid*	*Total amount of benefit paid*
				$
New South Wales	18	417	95,390	345,573
Victoria	14	385	60,895	195,950
Queensland	17	150	29,724	96,888
South Australia	8	176	38,069	128,501
Western Australia	8	160	23,559	74,946
Tasmania	4	72	15,504	48,965
Total 1974-75	**69**	**1,360**	**263,141**	**890,823**
Total—				
1973–74	55	1,560	273,052	582,137
1972–73	53	1,185	286,060	429,090
1971–72	49	1,295	291,989	437,984
1970–71	44	1,262	303,830	455,745

(*a*) As at 30 June.

The *Homeless Persons Assistance Act* was introduced in December 1974 to help non-profit organisations and local governing bodies which provide accommodation, food and social welfare services for homeless men and women.

The Act enables grants to be made to eligible organisations to meet the cost of purchasing, constructing, altering or renting buildings to be used as homeless persons' assistance centres, as well as to meet the cost of purchasing furniture, furnishings and equipment for such centres. Grants also meet half the salary of a social welfare worker employed at a centre, and help to meet the cost of providing food and accommodation for homeless persons, at an approved centre, or of meals provided at such centres for non-resident homeless persons.

The rate of the food and accommodation subsidy has been prescribed at 75 cents per day and the rate of meals subsidy as 25 cents per meal.

HOMELESS PERSONS ASSISTANCE ACT: GRANTS APPROVED, 1974-75

$

State or Territory	*Building projects*	*Rent of premises*	*Furniture, equipment*	*Staff salaries*	*Food and accommodation*	*Meals for non-residents*	*Total*
New South Wales	..	..	..	..	84,423	8,184	92,607
Victoria	..	12,834	227	15,130	98,269	15,626	142,086
Queensland	..	6,320	2,042	228	31,460	6,551	46,601
South Australia	..	..	..	..	10,684	2,144	12,828
Western Australia	9,660	2,730	20,301	..	11,550	2,418	46,659
Tasmania	..	147	..	..	2,679	624	3,450
Australian Capital Territory	..	..	..	..	..	..	..
Northern Territory	..	..	..	..	..	..	..
Australia	**9,660**	**22,031**	**22,570**	**15,358**	**239,065**	**35,547**	**344,231**

The *Delivered Meals Subsidy Act* 1970 came into operation on 15 April 1970. Its purpose is to help organisations to establish, maintain, expand and improve 'meals-on-wheels' services. The subsidy is at the rate of $2.50 for every ten meals provided by approved organisations. At 30 June 1975, 450 organisations had received a total subsidy of $1,490,292 under the Act. Organisations eligible for grants under the Act are the same as those specified under the Aged or Disabled Persons Homes Act.

Commonwealth Government assistance to States

The *States Grants* (*Deserted Wives*) *Act* 1968 provides for assistance to be given by the Commonwealth Government to the States in respect of aid for needy mothers with children where there is no breadwinner and the mothers are not eligible for benefits under the Social Services Act. Broadly, these include deserted wives during the first six months of desertion, wives during the first six months of the husband's imprisonment, deserted de facto wives, de facto wives of prisoners, other separated wives and unmarried mothers.

The type of assistance attracting a grant may be provided in the form of cash, food or clothing. The grant is made by the Commonwealth Government to the States on the basis of half the cost of the approved assistance paid to the mother or half the amount of Class 'A' widow's pension or supporting mother's benefit, which would have been payable had she been qualified to receive it, whichever is the lesser.

All States are now receiving assistance under the scheme. In 1974–75 payments by the Commonwealth Government amounted to $6,932,168.

The *States Grants* (*Home Care*) *Act* 1969 provides that the Commonwealth Government will share with participating States on a $2 for $1 basis, the cost of developing approved housekeeping or other domestic assistance provided wholly or mainly for aged persons in their homes. The Commonwealth Government will also share on a $2 for $1 basis with participating States up to a maximum of one-third of the capital cost of approved senior citizens' centres as well as meeting on a $2 for $1 basis with the States the cost of a salary of a welfare officer employed by such a centre. All States participate in this scheme. The Commonwealth Government share was increased to two-thirds of State expenditure from 1 July 1973.

PAYMENTS TO STATES FOR HOME CARE, SENIOR CITIZENS' CENTRES, AND WELFARE OFFICERS, 1974–75

($)

State	*Home Care Services*	*Senior Citizens' Centres*	*Welfare Officers*	*Total*
New South Wales	610,854	348,629	225,714	1,185,197
Victoria	441,404	149,420	51,553	642,377
Queensland	1,244,406	153,347	11,371	1,409,124
South Australia	563,303	363,104	15,777	942,184
Western Australia	115,981	28,206	14,865	159,052
Tasmania	123,806	154,050	..	277,856
Total	**3,099,754**	**1,196,756**	**319,280**	**4,615,790**

Northern Territory and Australian Capital Territory welfare services

Provision of social security and welfare services in these two Territories is the responsibility of the Commonwealth Government. In so far as welfare items can be identified for territorial accounting purposes, the following table shows the cost of providing these services.

AUSTRALIAN GOVERNMENT EXPENDITURE ON SOCIAL SECURITY AND WELFARE(a)
NORTHERN TERRITORY AND AUSTRALIAN CAPITAL TERRITORY
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Northern Territory—					
Current outlay	8,027	8,478	10,570	11,462	20,277
Gross capital formation (*b*)	455	348	623	220	500
Total outlay	**8,482**	**8,826**	**11,193**	**11,682**	**20,777**
Australian Capital Territory—					
Current outlay	395	635	756	874	1,375
Capital outlay—					
Gross capital formation (*b*)	..	..	..	..	501
Total outlay	**395**	**635**	**756**	**874**	**1,876**

(*a*) Includes expenditure on aboriginal affairs. (*b*) Expenditure on fixed assets and increase in stocks.

Aboriginal welfare

A referendum in May 1967 led to the repeal of Section 127 of the Constitution which provided that in reckoning the numbers for census purposes, Aboriginals should not be counted; and to the deletion of the words 'other than the Aboriginal race in any State' from Section 51 (xxvi) which relates to the power of the Commonwealth Parliament to make laws in respect to people of any race. The Commonwealth Government's aim is to help Aboriginals become self-managing and self-sufficient, while at the same time preserving and developing their own distinctive culture. It now shares with the States power to legislate in respect of Aboriginal people. The Commonwealth Government has assumed full responsibility for policy, planning and co-ordinating in respect of Aboriginal affairs at the national level, and has established a Department of Aboriginal Affairs with regional offices in all States and the Northern Territory. The Department also serves the Council for Aboriginal Affairs, comprising a Chairman and two members. In November 1973 an election was held by Aboriginals throughout Australia to establish the first National Aboriginal Consultative Committee, a group of 41 Aboriginals and Torres Strait Islanders which will be elected every two years, to advise the Government on Aboriginal needs. At the request of the Committee, the second election which was scheduled for November 1975, was deferred for nine months. Subsequently, the Government established an independent inquiry into the role of the Committee. The inquiry is to report by August 31, 1976.

Outlays by Commonwealth Government authorities, which have been identified as specifically relating to Aboriginal advancement, are shown in the following table.

OUTLAY ON ABORIGINAL ADVANCEMENT BY COMMONWEALTH GOVERNMENT AUTHORITIES

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Final consumption expenditure—					
Law, order and public safety	24	28	715	1,190	2,582
General research	369	429	449	1,252	1,286
Education	3,066	3,540	4,413	5,451	10,037
Health	393	603	1,069	1,518	2,734
Welfare	8,194	9,072	12,915	21,118	39,564
Housing	89	32	844	228	1,553
Community development	1	4	1	160	..
Recreation	77	115	466	809	1,281
Labour and employment	489	651	1,020	1,843	1,450
Total final consumption expenditure	*12,702*	*14,474*	*21,892*	*33,569*	*60,487*
Gross capital formation—					
Expenditure on new fixed assets—					
General research	57	41	64	248	367
Education	851	632	2,263	3,085	6,300
Health	103	7	277	1,087	1,597
Welfare	1,057	330	623	228	507
Housing	518	860	784	324	69
Community development	290	975	1,388	2,081	3,619
Total expenditure on new fixed assets	*2,876*	*2,845*	*5,399*	*7,053*	*12,459*
Expenditure on existing assets—					
Community development	..	..	1,547	421	2,976
Total gross capital formation	*2,876*	*2,845*	*6,946*	*7,474*	*15,435*
Transfer payments—					
Transfers to persons	2,527	3,012	4,920	7,012	8,699
Grants for private capital purposes	2,168	2,283	6,829	19,582	35,109
Grants to the States—					
Current	800	1,665	6,649	6,670	13,142
Capital	6,200	7,535	15,351	25,580	23,907
Total transfer payments	*11,695*	*14,495*	*33,749*	*58,844*	*80,857*
Net advances—					
To the States	..	−39	−19	−19	−18
To other sectors	725	672	362	1,207	1,712
Total net advances	*725*	*633*	*1,343*	*1,188*	*1,694*
Total outlay	**27,998**	**32,447**	**63,930**	**101,075**	**158,473**

State expenditure on certain welfare services

The following table shows net expenditure from State government funds on certain welfare services. The figures exclude expenditure on unemployment, bush fire, flood, etc.. relief, Aboriginal welfare, and some other items which are excluded because information cannot be obtained for all States. Loan fund expenditure is excluded also. Because of differences in organisation and accounting methods, the information shown for the items is not on exactly the same basis for all States; it may also be incomplete because particulars of some activities are not separately recorded and are therefore excluded. The expenditure shown is 'net' in the sense that receipts for services rendered have been deducted from gross expenditure.

NET EXPENDITURE BY STATE GOVERNMENTS ON CERTAIN WELFARE SERVICES
($'000)

Service and year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
1973–74—							
Relief of aged, indigent and infirm, child welfare, etc.	48,450	29,821	10,931	15,818	15,996	4,154	125,170
Miners' phthisis	39	44	. .	. .	84	. .	168
Total 1973–74	**48,489**	**29,865**	**10,931**	**15,818**	**16,080**	**4,154**	**125,338**
Total—							
1972–73	41,814	26,083	11,541	12,036	13,964	3,681	109,120
1971–72	33,758	23,132	8,282	9,044	12,838	3,164	90,219
1970–71	25,184	17,965	6,836	6,999	10,320	2,876	70,182
1969–70	21,453	14,317	5,702	5,751	8,817	1,966	58,006

Social Welfare

The Department of Social Security provides a professional social work service, a welfare service to migrants including a telephone interpreter service, (*see* also Migrant Welfare, Settlement and Integration, Chapter 7) and after care for refugees. It administers grants to the following bodies: Australian Council of Social Service, Australian Council on the Ageing, Australian Council for Rehabilitation of Disabled, Good Neighbour Councils, voluntary welfare agencies to employ social workers for work amongst migrant communities (Grant-in-Aid Scheme), Australian Council of Trade Unions to develop a research unit, State Governments for Social Policy Planning Units, Australian Branch of International Social Service and locally based community welfare agencies in serious financial difficulty (emergency funding only).

To assist in its role of advising the Government on welfare policy, the Department of Social Security initiates, develops and evaluates experimental projects in social welfare and undertakes research studies. The experimental projects currently being administered and evaluated by the Department are the Australian Assistance Plan, Community Information Centres and Welfare Rights Program.

The Australian Assistance Plan aims to assist in the planning and development, at a regional level, of integrated patterns of community welfare services which are complementary to the welfare policies and programs of the Commonwealth and State Governments and local goverment authorities, voluntary organisations and consumer groups. Thirty-seven regions in Australia are participating in the pilot phase of the Plan.

A pilot project of twelve Community Information Centres is being developed and evaluated to determine ways of establishing an effective system of information and referral for all members of the community.

The Welfare Rights Program consists of grants to 10 self-help organisations to enable them to employ a Welfare Rights Officer who aims to improve the access of disadvantaged persons to welfare services and entitlements.

The *Social Welfare Commission*, established under the *Social Welfare Commission* Act 1973, operated from April 1974 as an independent statutory advisory body on social welfare matters in Australia. It had operated for 12 months previously as an Interim Committee. The Government announced in February 1976 its intention to abolish the Social Welfare Commission.

The functions of the Commission are to recommend on the development of a balanced and integrated national program of social welfare and to establish program priorities accordingly. The Commission is responsible particularly for identifying and reporting on community needs in the welfare field.

The Commission consists of nine part-time Commissioners and a full-time Chairman and Deputy Chairman. It reports to the Minister for Social Security, and to the Parliament through the Minister.

In pursuit of its broad responsibilities for social analysis as the basis for recommending to Government on welfare matters, up until March 1976 the Commission had—

- published some 60 titles which have been widely distributed free-of-charge;
- participated in, and presented papers at conferences, seminars, working groups etc.;
- funded a total of 47 research projects at a cost of some $515,000; 21 projects had been completed and 26 others were continuing;
- made Fellowship awards to enable four people to undertake particular studies in an area of social policy of relevance to their own experience and expertise;
- undertaken major inquiries into the care of young children and care of the aged;
- established in co-operation with State Governments the first comprehensive study of services for families;
- developed and evaluated the Australian Assistance Plan and tabled in Parliament a report on the pilot phase of the Plan;
- presented a progress report on social welfare manpower in Australia, indicating preliminary findings and suggesting areas requiring further study;
- published papers on the role of local government in social welfare, issues in governmental financing of voluntary bodies, legislation for child and family welfare in the Australian States and Territories, and the needs of lone parent families in Australia;
- issued papers on the financing of social welfare activities in Australia, looking especially at expenditure patterns and levels of responsibility;
- undertaken preliminary work on classifying welfare services for comparative and forward planning purposes;
- convened committees to examine policy for inter-country adoptions and to develop guidelines on Commonwealth Government assistance towards national voluntary agencies. Papers on these subjects were forwarded to the Government.

The role of voluntary agencies in Australian social welfare

Voluntary agencies have played an important role in the provision of social welfare services in Australia since the earliest days of settlement. The oldest voluntary organisation in Australia is the Benevolent Society of New South Wales, founded in 1818, 'to relieve the poor, the distressed, the aged and the infirm'. During the 19th century voluntary agencies were active in all States providing homes for orphan and abandoned children; industrial schools for older boys and girls often rescued from total destitution in the streets; relief in food and clothing for widows, old people and families of the unemployed; hospitals for the sick poor; and institutions for the aged and invalid.

Although in this century the Commonwealth and State Governments have taken over many tasks formerly carried out by voluntary agencies, this has not led to any diminution in voluntary activity. The voluntary sector is probably more active today than it has ever been, not only carrying out its traditional role, but in opening up new fields of activity.

In caring for the aged, voluntary agencies are co-operating with the Government in providing aged persons homes, retirement villages, hostels for the frail aged and nursing homes for the sick aged. In addition to the provision of residential care, voluntary agencies are increasingly offering service to the aged in their own homes to enable them to be independent as long as possible. Services include 'Meals on Wheels', home help, leisure programs in senior citizens centres, friendly visiting to the lonely aged and sheltered workshops to provide meaningful activity, and many similar services designed to enhance the well-being of the aged.

The same pattern of activity is seen in services for the mentally and physically handicapped. Voluntary agencies provide day and residential schools for handicapped children, sheltered workshops for those able to undertake some employment and hostels for the handicapped in both sheltered and open employment. Many organisations provide home visiting services and occupational therapy for the home-bound, special training centres for various forms of rehabilitation, and recreational programs for those unable to participate in general community activities. The handicapped field is also noted for its activities in bringing together self help groups of the handicapped and their families to promote the well being of the handicapped and to encourage study and research into both prevention and rehabilitation.

Besides the various forms of health services described above, many major hospitals are provided by the voluntary sector. Of the approved hospitals in Australia, almost 15 per cent are run by voluntary organisations. Such hospitals cover a wide range of needs and in addition provide nursing training which may ultimately be of service to the full range of hospitals and nursing homes.

Family and child welfare has long been an important area for voluntary activity. Children's homes provide for children deprived of normal home life because of serious problems within the family, in a wide variety of units ranging from the small family group home in an ordinary house in the suburbs, to the large unit of cottage homes grouped together. As with other services, recent years have shown a marked emphasis on preventive services through family welfare agencies and to greater use of substitute families in adoption and foster care programs.

Within the modern family welfare agency, assistance is given not only with money and food, as in the last century, but with marriage guidance, parental counselling and home-maker services, all designed to keep the family together as a unit. Other voluntary agencies run services for the single mother or provide day-care services to assist working mothers, in particular the one parent family or the family under special strain.

The well-being of Australian youth is also a matter of concern to the voluntary sector which runs youth activities of many varieties, offers adolescent counselling services and is showing a growing concern for the seriously emotionally disturbed and those becoming addicted to drugs.

As well as these general community services, special services for Aborigines have been a feature of voluntary activity. Formerly these were mainly concerned with the mission area but of late many agencies have been formed, often run wholly by Aborigines, to assist urban dwellers. Legal aid services, head start programs, nutrition programs and many others are now being made available through voluntary effort.

The care of immigrants is also a significant activity and again much of this work is now undertaken by settled immigrants in conjunction with longer established Australians.

Prisoners and ex-prisoners also receive their share of attention. Organisations exist to visit prisoners and assist their families. These will also assist prisoners on discharge, to re-settle in the community, either at home, in lodgings or in hostels provided by the agency. Other agencies concern themselves with alcoholics, homeless men and women and others temporarily destitute.

The list of activities by no means covers all the work done by the voluntary sector New and experimental services such as Lifeline and Samaritans, drug contact centres, drop-in coffee houses, street workers for alienated youth and many others, are evidence of the continued ability of the voluntary sector of social welfare to develop and meet new social needs.

Another area of developing interest involves the participation of various kinds of citizen groups in social welfare services. These include Community Information Centres and Community Aid services largely manned by volunteers; groups of clients of social welfare services who provide both a service for their members and liaise with Departmental services on questions of the way service is offered to people in need; and Resident Action groups who are concerned to participate in any replanning of their neighbourhood. This area of citizen involvement can be expected to become more and more important over the next few years.

During 1973 and 1974 many new fields of activities opened up for voluntary groups. The Australian Assistance Plan (*see* page 444) is aiming to involve a wide range of community groups through Regional Councils of Social Development in the planning and development of local community services. Grants are available from the Schools Commission to groups to provide programs for disadvantaged children, and from the Department of Recreation and Tourism to provide for voluntary activity by and for young people.

Studies of social needs and of the quality and the adequacy of present services are a continuing concern of the voluntary sector which through the work of Councils of Social Service at the State and the national level, promote the well-being of the deprived and disadvantaged sections of the community and the general social development of Australia.

CHAPTER 14

PUBLIC HEALTH

This chapter is concerned with activities of the Commonwealth Department of Health including quarantine, national health benefits programs and Federal grants for health purposes; activities of the State Health Departments; statistics of hansenide hospitals and mental health institutions; statistics of notifiable diseases; and cremations. Statistics relating to causes of death are presented in Chapter 8, Vital Statistics.

Further information about the administration of public health services is contained in the annual reports of the Director-General of Health; the annual reports of the State health authorities; and in the Year Books and annual bulletins published by the State offices of the Australian Bureau of Statistics.

NATIONAL HEALTH SERVICES

Prior to an amendment to the Constitution in 1946 the only health function of the Commonwealth Department of Health was in relation to quarantine. Consequent upon this amendment the Commonwealth Government was given powers to make laws in respect to pharmaceutical, hospital and sickness benefits and medical and dental services. The Commonwealth Government also has used its powers under section 96 of the Constitution to make grants to the States for health purposes. In addition the Commonwealth Government gives financial assistance to certain organisations concerned with public health matters. A number of Commonwealth Government health organisations have been established; detailed information on the functions and operations of these organisations is given in this and previous Year Books and in the annual reports of the Commonwealth Director-General of Health.

Quarantine

The *Quarantine Act* 1908 is administered by the Commonwealth Department of Health and has three sections of disease control, as follows: (i) human quarantine; (ii) animal quarantine; and (iii) plant quarantine.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Commonwealth Government action is necessary for the protection of any State or States. In general the administration of interstate movements of animals and plants is left in the hands of the States.

Human quarantine

With a few exceptions, which concern persons who have spent at least 14 days in areas adjacen to Australia (e.g. New Zealand, Papua New Guinea and Fiji) all passengers and crews arriving in Australia from overseas, whether by air, or sea are subject to medical inspection for the purpose of preventing the introduction of disease into Australia. At the major ports full-time quarantine officers carry out the work, but in the minor ports local doctors act as part-time quarantine officers. Quarantine activities are controlled by the Directors of Health in each State who are senior medical officers of the Commonwealth Department of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague, and typhus fever. These diseases are not endemic to Australia and it is of great importance to prevent their entry. Quarantine stations at the major ports and at Darwin and Townsville are kept ready for occupation at all times. In addition, persons arriving in Australia and suffering from infectious diseases such as chicken-pox, mumps, scarlet fever, and measles are directed to appropriate care and placed in isolation where necessary.

Valid International Certificates of Vaccination are required of travellers to Australia as follows:

Smallpox. From travellers over the age of 12 months who, within the last 14 days have been in a country any part of which is infected with smallpox.

Cholera. No certificate is required.

Yellow fever. All arrivals from yellow fever endemic zones.

All passengers, whether they arrive by sea or air, are required to give their intended place of residence in Australia, so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship by which they travelled to Australia.

Isolation. Under the Quarantine Act, airline and shipping operators are responsible for the expenses of isolation of all travellers who disembark either (i) having been in an endemic zone within 6 days of arrival and not possessing a yellow fever vaccination certificate; or (ii) having arrived by air without a smallpox vaccination certificate and refusing to be vaccinated on arrival.

The numbers of cases of infectious (non-quarantinable) diseases which were discovered among the passengers and crew of overseas vessels and aircraft calling at Australian ports are shown in the following tables.

HUMAN QUARANTINE: CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES ON OVERSEAS VESSELS AND AIRCRAFT CALLING AT AUSTRALIAN PORTS 1974–75

Disease	*Total number of cases of infectious disease*
Chicken pox	37
Dysentery	8
Gastro-enteritis	3
Herpes	7
Infectious dermatitis	2
Infectious hepatitis	11
Influenza	7
Leprosy	3
Measles	9
Meningitis	1
Mumps	7
Rubella	7
Salmonella infection	3
Venereal disease	147
Total	**252**

HUMAN QUARANTINE: OVERSEAS VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES FOUND

	Number of Overseas vessels and aircraft cleared		*Number of cases of infectious disease*
Year	*Ships*	*Aircraft*	
1970–71	6,233	8,127	562
1971–72	5,872	7,895	477
1972–73	5,975	11,879	511
1973–74	6,318	9,023	408
1974–75	6,515	12,757	252

The provisions of the State Health Acts with regard to the compulsory notification of infectious diseases and statistics of cases notified in the years 1971 to 1975 are dealt with on pages 466–7 of this chapter.

Animal quarantine

Animal quarantine, authorised by the provisions of the *Quarantine Act* 1908, aims at preventing the introduction or spread of animal diseases. It covers the importation of all animals, raw animal products and biological cultures associated with animal diseases, and goods associated with animals.

Of the domesticated animals, only horses, dogs and cats, are admitted from a limited number of countries outside Australasia. Cattle, sheep, goats and pigs may be imported only from New Zealand. All must be accompanied by health certificates which may include prescribed tests. Dogs and cats, except those from New Zealand, are subject to quarantine detention on arrival in Australia. Zoological specimens are imported into registered zoos, where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In similar manner, animals for scientific purposes are imported to approved laboratories. Bovine semen may be imported only from the United Kingdom, Ireland, Canada and New Zealand. Raw animal products such as hair, wool, skins and hides are specially treated under quarantine control. Such items as raw meat, which cannot be sterilised, are admitted only from New Zealand. Other items may be treated to destroy any possible infection. Special attention is given to the importation of biological substances of animal origin.

The Animal Quarantine Branch was created in 1926. The central administration is situated within the Department of Health in Canberra, with an Assistant Director-General and veterinary officers. The Principal Veterinary Officer of the Department of Agriculture in each State is appointed Chief Quarantine Officer (Animals) of that State, and members of his staff Quarantine Officers (Animals). These State officers carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each State capital.

Information regarding animal diseases and parasites in Australia is collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions. In matters of policy and the quarantine control of imports there is a close liaison with the Bureau of Customs.

The Branch collaborates with the General and Plant Divisions of the quarantine service. Many diseases of animals are communicable to man, and for this reason animal and general quarantine administration are in some respects closely allied. Similarly the interests of animal and plant divisions overlap, many items such as insects, fodder and straw being the subject of combined control.

Plant quarantine

Australia is free of many of the pests and diseases of agriculture which occur in other parts of the world. Since 1 July 1909 the importation into Australia of plant materials has been subject to an increasingly stringent quarantine; some materials are admitted only under certain conditions while others are prohibited altogether. The quarantines are designed to keep out of the country any additional pests and diseases which, while not a danger in their natural habitat, may thrive in the Australian environment and, if introduced, bring about serious economic losses to Australian agriculture.

The quarantine of plants and plant material entering Australia is the responsibility of the Commonwealth Government; the State Governments provide co-operation in the operation of the plant quarantine service. The movement of specified fruits and other plant materials within Australia is the responsibility of the State Governments.

The Commonwealth Government regulations governing plant quarantine apply to all plants or parts of plants, whether living or dead, and include seeds and fruits as well as timber, soil, living insects, cultures of organisms, containers, machinery, vehicles, furniture, packing materials and some foods, toys, sporting goods or tools of trade. All such goods must be declared whether they are imported as commercial consignments or as personal effects, curios, souvenirs and unprocessed food carried in luggage or on the persons of tourists, immigrants or other travellers. Heavy penalties are laid down for evasion of the regulations.

Quarantine inspectors are required to examine all plant material at the first port of entry and to release only material which is not considered to be a danger to agriculture or for which prior approval to import has been obtained. Any material found to be carrying diseases or pests, or suspected of doing so, may be ordered into quarantine for remedial treatment, the cost of which is met by the importer. All bamboo, cane and rattan articles are automatically fumigated. Destruction may be ordered where treatment or return to sender is impracticable, or no prior approval has been obtained, or the goods are prohibited imports.

Certain material, such as nursery stock and some seeds, may be imported only with special permission, and then in small quantities sufficient merely to establish a variety or strain. Arrangements must be made for this material to be grown in post-entry quarantine in Australia at a nursery registered by the Australian authorities. Application to import goods of this nature must be lodged in advance with the Chief Quarantine Officer (Plants) of the State Department of Agriculture in the capital city of the State of destination or with the Director of Quarantine in Canberra. Other restricted seeds or materials of plant origin for use as human or animal food or for manufacturing purposes, may have to be processed under quarantine supervision, and imports of this description also require prior approval.

Strict supervision by way of inspection and treatment, where necessary, is exercised over the timber components as well as the contents of cargo containers and unit cargoes. Packing materials of straw, raw cotton, rice hulls or rice straw are prohibited imports which will be destroyed at the port of entry. Cases or cartons which have previously contained fruit or plant materials are prohibited imports, while dunnage and scantlings used in containers or cargo holds are subject to quarantine. All timber, including logs or sawn timber, is carefully inspected to ensure that it does not contain insects which could spread to forests or timber constructions.

Facilities for quarantine treatments and inspections including the propagation of plants and seeds are available in each State, the Northern Territory and in the Australian Capital Territory where a plant quarantine research station has been established to undertake research into plant quarantine techniques and special treatments not usually investigated by established research groups within Australia or overseas. The Plant Quarantine Research Station in Canberra is equipped to undertake studies in the disciplines of plant pathology, entomology, nematology and virology as well as providing assessment and development of quarantine equipment and treatments.

Additional information concerning Australian plant quarantine regulations, treatments and lists of prohibitions and restrictions, may be obtained from Australian consular offices abroad, the Director of Plant Quarantine with the Commonwealth Department of Health in Canberra or from the Chief Quarantine Officer (Plants) with the respective State Departments of Agriculture in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart.

Personal health services and subsidies

National Health Benefits

The Medibank Program, a scheme of national health insurance, commenced on 1 July 1975. Policies relating to Medibank and other aspects of the Government's health benefits schemes are the responsibility of the Commonwealth Department of Health.

The hospital side of the Program has been based on agreements between the Commonwealth and the State Governments. The Commonwealth Government agreed to share equally with the States the net operating costs of recognised (i.e. public) hospitals covered by the agreements. The agreements commenced on the following dates—South Australia and Tasmania, 1 July 1975; Victoria and Western Australia, 1 August 1975; Queensland, 1 September 1975; and New South Wales, 1 October 1975. Half the net operating costs of recognised (public) hospitals in the Australian Capital Territory and the Northern Territory have been met under the Medibank Program since 1 July 1975.

The Commonwealth Government received legal advice during May 1976 that the hospital agreements were invalid. Consequently the *States Grants (Hospital Operating Costs) Act* 1976 was passed to enable the Commonwealth to continue to contribute to the net operating costs of recognised (public) hospitals. The Act was an interim measure to enable new arrangements to be made.

On admission to a recognised (public) hospital, patients are able to choose to be accommodated as either *hospital patients* or *private patients*. Hospital patients receive all necessary hospital services, including medical treatment, free of charge. Private rooms are provided for hospital patients on the basis of medical necessity.

Private patients are required to pay for their hospital accommodation, the rates being $20 and $30 per day for multi-bed wards and single bed rooms respectively. They are treated by the medical practitioner of their choice. Private insurance coverage is available from registered hospital benefits organisations to cover these fees. Private doctors' fees have attracted Medibank medical benefits.

Patients in private hospitals also have their accommodation subsidised under Medibank. This subsidy is at the rate of $16.00 per day and is paid to the hospitals which then deduct an equivalent amount from the patients' accounts.

Australian residents who are hospitalised whilst temporarily absent overseas are eligible for a Medibank hospital benefit of $16 per day. Contributors to hospital benefits organisations will also receive benefits from those organisations subject to the combined benefits not exceeding the fees charged.

The Special Account Arrangements of hospital benefits continued to operate following the introduction of Medibank (hospital). They are designed to ensure that fund benefits are paid to contributors to registered health benefits organisations who would otherwise be denied hospital benefits under the organisations' rules relating to chronic illnesses. Under these arrangements, an organisation transfers a contributor to the Special Account if, in accordance with its rules, fund benefits are not payable. Fund benefits (within specified limitations) for which the contributor is eligible are then paid and debited to the Special Account. The Contributor's contributions are credited to the Special Account, and the Government reimburses the organisation to the extent of the amount of the deficit of the Account.

Medical benefits through Medibank are paid in respect of services rendered by medical practitioners, optometrical consultations by participating optometrists and certain services rendered in operating theatres of hospitals by approved dentists. The benefits are based on a schedule of fees which lists a separate fee for each item of service in each State. Medibank medical benefits for any service is 85 per cent of the schedule fee for that service in the State in which it was rendered with a maximum gap of $5 between the schedule fee and the benefit for that service to be met by the patient.

Persons receiving medical services from a specialist receive benefits to cover the higher cost involved, provided that they are referred to the specialist by another medical practitioner, by a dentist for a service arising from a dental service, or by an optician or optometrist when referred direct to an ophthalmologist.

Under Medibank, eligible pensioners, i.e. former Pensioner Medical Service pensioners, are eligible for the same benefits as all other persons in the community. In addition, provision exists for the making of arrangements whereby they will receive benefits without direct cost. Every doctor providing medical services in Australia has been invited to enter into an undertaking that he will ask eligible pensioners and their dependants whether they wish to assign medical benefits to the doctor in the way described above. Where the doctor and the pensioner agree to the assignment of benefits, the benefits will be paid direct to the doctor by Medibank and be accepted by him in full payment of the medical expenses incurred by the pensioner.

Funding of the Medibank scheme has recently been altered. From 1 October 1976, free Medibank medical and hospital cover applies only to persons below a certain income level. Persons above that level must contribute through an optional taxation levy, membership of a private health fund or a direct contribution to Medibank.

Nursing Home Benefits

Benefits available in respect of qualified nursing home patients are:

(i) *Ordinary Care Benefit*, currently payable at the rate of $3.50 a day, is paid for all qualified nursing home patients in premises which have been approved as nursing homes under the National Health Act.

(ii) *Supplementary Benefit*, introduced on 1 January 1969 to provide for the payment of $3.00 a day for patients who require and receive intensive nursing home care as defined in the National Health Act. This benefit is payable in addition to the ordinary care benefit making a total of $6.50 a day for approved patients. Both the ordinary care benefit and the supplementary benefit are paid by the Commonwealth Government direct to nursing home proprietors who are required to deduct such amounts from the accounts issued to patients.

(iii) *Additional Benefit for Pensioner Patients*, introduced on 1 January 1973 in respect of patients who hold Pensioners Health Benefits cards, is payable direct to nursing home proprietors in the same manner as the basic nursing home benefits referred to above. Eligible pensioners are not required to take out health insurance coverage to receive this benefit which is payable in addition to the preceding benefits. The rates of benefit payable differ from State to State and are set out below.

(iv) *Insurance Benefit for Non-pensioner Patients*. Patients who are not qualified pensioners for the purpose of receiving the additional pensioner benefit can receive the same rate of additional benefit if insured with a registered hospital benefits organisation. This benefit is paid by the registered hospital benefit organisation direct to the nursing home.

The additional benefits (iii) and (iv) above are based on a minimum patient contribution (currently $5.90 a day) as provided for in the National Health Act.

The maximum level of additional nursing home benefits payable in each State is: New South Wales $39.90 per week ($5.70 daily); Victoria $64.05 ($9.15); Queensland $43.05 ($6.15); South Australia $64.05 ($9.15); Western Australia $38.85 ($5.55) and Tasmania $54.25 ($7.75).

Where the fees charged by a nursing home are in excess of the combined total of basic Government benefit (either $3.50 or $6.50 a day) plus the patient contribution ($5.90 a day) plus additional benefit (to maximum shown above), the difference must be met by the patient. Conversely, where the nursing home fee is less than this combined total, the additional benefit (whether fund benefit or Government benefit for pensioners) is reduced by that amount.

Deficit Financing of Religious and Charitable Nursing Homes as an alternative to the provision of patient benefits under the National Health Act (as outlined above) the *Nursing Homes Assistance Act* 1974 provides for an arrangement whereby the Commonwealth Government may meet the net operating deficits of religious and charitable nursing homes.

All organisations wishing to participate in the deficit financing arrangements must enter into a formal agreement with the Commonwealth Government for that purpose.

Nursing home patient benefits as provided under the National Health Act are not payable to a nursing home during any period in respect of which that nursing home participates under the deficit financing arrangements.

Nursing homes participating under the deficit financing arrangements are required to charge a minimum patient fee currently at the rate of $41.25 a week. However, provision does exist for this 'prescribed fee' to be waived in certain circumstances.

Domiciliary Nursing Care Benefits. A domiciliary nursing care benefit became effective from 1 March 1973. In general terms it is payable, at the rate of $14 a week ($2 daily), to persons who are willing and able to care, in their own homes, for aged parents or immediate relatives who would otherwise qualify for nursing home benefits. The basic criteria for the payment of the benefit are that the patient must be aged 65 years or over and be in need of continuing nursing care and receive regular visits by a registered nurse. This benefit is not subject to a means test and is payable, under the National Health Act, in addition to any entitlements that persons may have under the Social Services Act or the Repatriation Act for pensions or other supplementary allowances.

HOSPITAL, NURSING HOME AND DOMICILIARY NURSING CARE BENEFITS AND PAYMENTS, UNDER THE NATIONAL HEALTH ACT AND NURSING HOMES ASSISTANCE ACT, 1974–75

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Uninsured patients (80c) . .	336	166	71	39	68	15	17	13	725
Insured patients ($2.00) (*a*) .	10,836	7,040	2,297	2,800	2,259	719	(*b*)	(*b*)	25,952
Hospitalisation free of charge ($2.00)	118	133	2,412	15	1	10	144	1	2,833
Pensioner patients ($5.00) .	10,234	5,411	3,845	1,879	2,276	1,193	79	270	25,187
Nursing home patients ($3.50)	27,980	10,724	8,853	4,974	5,993	1,870	(*c*)	232	60,627
Intensive care nursing home patients ($3.00) . .	8,190	6,516	4,413	2,554	2,801	640	(*c*)	63	25,177
Pensioner nursing home patients(*d*) . . .	25,318	16,725	7,620	7,170	5,009	2,135	(*c*)	189	64,167
Nursing home deficit financing payments(*e*) . .	3,278	2,667	756	2,038	857	508	(*c*)	(*d*)	10,103
Domiciliary nursing care ($2.00)	2,223	1,667	1,315	770	762	375	(*c*)	(*d*)	7,112
Total . . .	**88,513**	**51,048**	**31,583**	**22,239**	**20,025**	**7,464**	**241**	**769**	**221,882**

(*a*) Excludes payments of $70,202,000 towards Special Accounts deficits, $1,141,000 towards Subsidised Health Benefits Plan management expenses and $17,344,000 towards Subsidised Health Benefits hospital and nursing home fund benefit reimbursements. (*b*) Insured patients are shown by State of registration of organisations. No organisations are registered in the A.C.T. or N.T. and insured patients in the two territories are covered by organisations registered in the States. (*c*) Included in South Australia. (*d*) Included in New South Wales. (*e*) Deficit financing arrangements under the Nursing Homes Assistance Act commenced on 1 January 1975.

Federal Authorities Expenditure

Pharmaceutical benefits

All persons receiving treatment from a medical practitioner registered in Australia are eligible for benefits on a comprehensive range of drugs and medicines when supplied by an approved pharmacist upon presentation of a prescription, or by an approved private hospital to patients receiving treatment at the hospital. Special arrangements exist to cover prescriptions dispensed at locations outside the normal conditions of supply, e.g. in remote areas.

Since the introduction of the Medibank scheme patients in recognised hospitals are supplied with drugs and medicinal preparations under that scheme.

Patients, other than eligible pensioners and their dependants now pay a contribution of $2.00 for each benefit prescribed. Total cost of prescriptions for eligible pensioners and their dependants is met in full by the Commonwealth Government.

Patient contribution for the general public since the commencement of the current pharmaceutical benefits scheme was: 50 cents, from March 1960; $1.00 from 1 November 1971; $1.50 from 1 September 1975 and $2.00 from 1 March 1976. Between 1 November 1971 until 29 February 1976, beneficiaries under the subsidised Health Benefit Plan obtained pharmaceutical benefits on payment of half the normal patient contribution.

The following table sets out the number of prescriptions and expenditure on the more frequently prescribed therapeutic preparations under the Pharmaceutical Benefits Scheme for 1973–74 and 1974–75. The expenditure includes patient contributions ($59.0m in 1973–74 and $66.8m in 1974–75) and prescriptions issued free to pensioners ($66.8m and $80.6m). Benefits dispensed by hospitals and through miscellaneous services are not included. These amounted to $43.4m and $50.4m.

Summary of cash benefits to persons

For an analysis by function and economic type of expenditure by all Commonwealth Government authorities *see* Chapter 18, Public Finance.

Most Commonwealth Government health benefits are financed through the National Welfare Fund and the Health Insurance Commission. The following two tables show cash benefits to persons by Federal Authorities for recent years.

FEDERAL AUTHORITIES: HEALTH CASH BENEFITS TO PERSONS 1975-76
($'000)

	N.S.W. (a)	*Vic.*	*Qld*	*S.A. (a)*	*W.A.*	*Tas.*	*N.T. (a)*	*A.C.T. (a)*	*Abroad*	*Total*
Hospital and clinical services—										
Hospital benefits for pensioners	3,786	1,325	1,059	194	606	193	..	33	..	7,196
Medibank—Private hospital daily bed payments .	13,738	17,395	9,234	7,724	5,175	1,826	..	171	..	55,263
Hospital benefits, n.e.c. .	46,531	28,301	10,403	9,188	6,257	2,478	..	7	..	103,165
Nursing home benefits .	76,259	44,101	28,337	21,462	18,773	6,621	..	..	..	195,553
Tuberculosis campaign allowances . . .	366	191	160	58	77	46	..	..	..	898
Rehabilitation of ex-servicemen	51	85	39	15	17	9	..	6	..	223
Total . . .	*140,731*	*91,398*	*49,232*	*38,641*	*30,906*	*11,172*	..	*217*	..	*362,298*
Other health services—										
Medical benefits for pensioners	1,944	1,472	822	539	372	175	..	19	..	5,344
Medibank—Medical benefits	263,950	162,119	75,859	57,450	42,067	14,622	..	13,403	..	629,471
Domiciliary care . .	2,322	1,811	1,412	852	847	452	..	..	..	7,697
Medical benefits, n.e.c. .	33,936	24,243	8,245	6,942	5,737	1,641	..	..	..	80,744
Pharmaceutical benefits for pensioners . . .	45,488	25,524	16,270	9,884	7,104	3,064	..	..	..	107,334
Pharmaceutical benefits, n.e.c.	62,415	40,475	20,369	13,106	9,999	3,788	..	26,357	..	176,509
Milk for school children .	..	..	..	..	..	..	..	8	..	8
Total . . .	*410,054*	*255,644*	*122,977*	*88,774*	*66,127*	*23,742*	..	*39,788*	..	*1,007,107*
Total health . .	**550,785**	**347,043**	**172,209**	**127,415**	**97,032**	**34,915**	..	**40,005**	..	**1,369,405**

(*a*) State totals for New South Wales and South Australia also include most of the unallocable expenditure on cash benefits to persons resident in the Australian Capital Territory and the Northern Territory respectively.

FEDERAL AUTHORITIES: HEALTH CASH BENEFITS TO PERSONS
($'000)

	1971–72	*1972–73*	*1973–74*	*1974–75*	*1975–76*
Hospital and clinical services—					
Hospital benefits for pensioners	24,065	23,768	24,295	25,187	7,196
Medibank—Private hospital daily bed payments	..	..	..	..	55,263
Hospital benefits, n.e.c.	67,305	82,270	89,488	116,150	103,165
Nursing home benefits	70,593	92,836	112,740	161,593	195,553
Tuberculosis campaign—allowances	630	780	740	754	898
Rehabilitation of ex-servicemen	..	134	150	201	223
Other	..	..	1	..	..
Total	*162,593*	*199,788*	*227,414*	*303,885*	*362,298*
Other health services—					
Medical benefits for pensioners	27,804	30,822	35,417	47,800	5,344
Medibank—Medical benefits	..	..	..	..	629,471
Medical benefits, n.e.c.	132,574	160,238	163,449	195,818	80,744
Pharmaceutical benefits for pensioners	52,005	58,139	66,803	80,699	107,334
Pharmaceutical benefits, n.e.c.	121,263	119,493	151,493	181,643	176,509
Milk for school children	11,894	11,781	8,118	58	8
Domiciliary care	..	1,022	6,309	7,112	7,697
Total	*345,540*	*381,495*	*431,589*	*513,130*	*1,007,107*
Total health	**508,133**	**581,283**	**659,003**	**817,015**	**1,369,405**

PRESCRIPTIONS DISPENSED UNDER THE PHARMACEUTICAL BENEFITS SCHEME(*a*) 1974 AND 1975

	Year ended 30 June			
	1974		*1975*	
Drug group	*Prescriptions*	*Expenditure*	*Prescriptions*	*Expenditure*
	000's	$'000	000's	$'000
Analgesics	7,777	19,814	9,392	23,550
Anovulants	5,244	11,790	5,823	14,260
Antacids	2,467	4,297	2,516	4,742
Anti-cholinergics	1,271	4,602	1,345	4,767
Anti-convulsants	462	2,079	480	2,280
Anti-depressants	3,309	7,770	3,431	8,283
Anti-diabetics	737	4,152	770	4,971
Anti-histamines	4,391	9,280	4,750	10,547
Blood vessels-Drugs acting on	3,909	17,094	3,929	18,387
Broad spectrum antibiotics	6,492	20,560	6,771	22,528
Bronchial spasm preparations	3,221	12,889	4,079	16,604
Corticosteroids	781	2,304	786	2,421
Diuretics	4,744	16,820	5,344	19,183
Expectorants and cough suppressants	868	922	1,413	1,691
Eye drops	1,475	2,823	1,615	3,365
Gastro-intestinal sedatives	757	1,788	1,047	2,806
Genito-urinary infections-Drugs acting on	1,552	4,978	1,637	5,311
Heart-Drugs acting on	1,861	7,288	2,372	10,666
Iron preparations	1,415	1,968	1,439	2,166
Parkinsons-Drugs used for	383	1,931	392	2,079
Penicillins	5,928	17,809	6,752	20,688
Sedatives and hypnotics	4,535	5,764	4,617	6,408
Sera vaccines	968	1,504	928	1,598
Sulphonamides	1,663	4,816	2,156	6,735
Tranquillisers	5,915	13,291	6,183	14,505
Water and electrolyte replacement	2,133	4,705	2,377	5,814
Other drug groups	13,030	28,194	15,331	35,568
Total	**87,288**	**231,230**	**97,674**	**271,921**

(*a*) Excludes benefits dispensed by hospitals and those covered by special arrangements.

Anti-tuberculosis campaign

Under an arrangement with the Commonwealth Government, each State conducts a campaign against tuberculosis. The Commonwealth Government reimburses the State for all approved capital expenditure in relation to tuberculosis, and for net maintenance expenditure to the extent that it exceeds maintenance expenditure for the year 1947–48. Thus the States carry out the physical or field work of the national campaign and the Commonwealth Government acts in an advisory, co-ordinating and financial capacity. The National Tuberculosis Advisory Council has been set up to advise the Minister with respect to the running of the campaign. There are twelve members, the chairman being the Director-General of the Commonwealth Department of Health.

To reduce the spread of infection the Commonwealth Government pays allowances to persons suffering from infectious tuberculosis, so that they may give up work and undergo treatment. These allowances have been in operation since 13 July 1950 and the current rates payable with effect from 13 May 1976 are shown in the following table.

RATES OF TUBERCULOSIS ALLOWANCE: AUSTRALIA, 1976

($)

Classification	*Weekly allowance*
Sufferer with dependent spouse	36.00
Dependent spouse of sufferer	36.00
Sufferer without spouse but with a dependent child	45.25
Sufferer without dependants	(*a*)44.50

(*a*) Reduced to $41.25 where treatment is received free of charge in an institution.

In addition to these rates there may be payable a mother's or guardian's allowance of up to $6.00 a week or supplementary assistance of up to $5.00 a week. An allowance of $7.50 a week is payable in respect of each dependent child of a sufferer.

There is a means test on income but not on property. The allowance is reduced by half the amount by which a person's income from sources other than his allowance exceeds, in the case of a married person with a dependent spouse $34.50, and without a dependent spouse or other dependant, $20 a week.

Commonwealth Government expenditure. Expenditure by the Commonwealth Government on its anti-tuberculosis campaign is set out in the following tables.

COMMONWEALTH GOVERNMENT EXPENDITURE ON ANTI-TUBERCULOSIS CAMPAIGN 1974–75

($'000)

State or Territory	*Commonwealth Government reimbursements to States and payments in Territories*		*Cash benefits to persons*(*b*)	*Total*
	Capital	*Maintenance*(*a*)		
New South Wales	34	3,923	274	4,231
Victoria	10	4,128	161	4,299
Queensland	56	2,979	148	3,183
South Australia	31	1,114	38	1,183
Western Australia	. .	992	56	1,048
Tasmania	. .	435	58	492
Northern Territory	. .	382	23	405
Australian Capital Territory	. .	98	1	99
Australia	**131**	**14,051**	**759**	**14,940**

(*a*) Includes administrative costs of $516,854 payable from Consolidated Revenue. (*b*) Allowances to sufferers.

COMMONWEALTH GOVERNMENT EXPENDITURE ON ANTI-TUBERCULOSIS CAMPAIGN

($'000)

Year	*Commonwealth Government reimbursements to States and payments in Territories*		*Cash benefits to persons(b)*	*Total*
	Capital	*Maintenance(a)*		
1970–71	469	10,938	659	12,067
1971–72	438	9,942	630	11,010
1972–73	388	11,242	780	12,409
1973–74	441	11,740	716	12,897
1974–75	131	14,051	759	14,940

(*a*) Includes administrative costs payable from Consolidated Revenue. (*b*) Allowances to sufferers.

Mass immunisation campaigns

Poliomyelitis. An anti-poliomyelitis campaign, using Salk vaccine, was commenced in 1956. This campaign continued until 1967 when, following a recommendation by the National Health and Medical Research Council, a campaign using Sabin vaccine was commenced in all States, the Northern Territory and the Australian Capital Territory. The Sabin vaccine is taken orally and a course of treatment consists of three doses. These are given at intervals of eight weeks. In the period 1967 to 1974 fifteen new cases were reported. In 1975 one new case was reported.

Measles. As a result of a recommendation by the National Health and Medical Research Council in May 1969, campaigns against measles commenced in early 1970 and during 1972 were in operation in all States, the Australian Capital Territory and the Northern Territory. The vaccine being used is derived from the Schwarz virus strain which is a live attenuated virus. It is administered by intramuscular injection to children in their second year of life. A course of treatment consists of one dose. A total of 242,720 doses was distributed through the Commonwealth Serum Laboratories during 1975.

Rubella. In 1969, the National Health and Medical Research Council recommended that the Cendehill rubella vaccine be used in anti-rubella (German measles) campaigns in Australia. Consequently, the Commonwealth Government agreed to make this vaccine available to the States on the same basis as poliomyelitis and measles vaccines. By December 1970 all States had indicated that they would accept this offer. Immunisation campaigns have been conducted in all States, the Northern Territory and the Australian Capital Territory since 1971 amongst girls in the twelve to fourteen years age group. The vaccine is available from health departments and, through them, from private practitioners to other women at risk. A course of treatment with rubella vaccine, given intra-muscularly, is one dose.

Community health services and subsidies

The Commonwealth Government, through the Department of Health, introduced two programs in 1973–74 aimed at developing and maintaining community-based health services. These programs form part of the Government's policy to promote the regionalisation and modernisation of hospitals, linked with the development of community-based health services and preventive health programs.

The *Hospitals and Health Services Commission* has the responsibility of submitting recommendations to the Minister for Health for allocation of both capital and operating funds to develop and maintain community-based general health care services, including prevention, treatment, rehabilitation and related welfare aspects of community health. The implementation of the approved programs is undertaken by the Department of Health in co-operation with State Governments. (For further details *see* page 460.)

Under the *Mental Health and Related Services Assistance Act* 1973, grants are made available to State Governments, local government authorities or voluntary agencies for the provision of 'medical and other services or facilities for, or in relation to, the prevention or diagnosis of, or the treatment or rehabilitation of persons suffering from mental illness, mental disability, alcoholism or drug dependence".

The *Home Nursing Subsidy Scheme*, which is a continuing service at the community level provides for a Federal subsidy to assist in the expansion of home nursing activities. Organisations eligible for the subsidy are those which are non-profit making, employ registered nurses, and receive assistance from a State Government, local government body or other authority established by or under State legislation. During 1974–75 subsidies totalling $7.2m were paid to 179 organisations providing home nursing services in the States. Home nursing services in the Northern Territory and the Australian Capital Territory are provided by the Commonwealth Department of Health.

National health services organisations

The Commonwealth Department of Health Pathology Laboratory Service was originally established under provisions of the *National Health Act* 1953. The laboratories provide diagnostic and investigational facilities at fifteen locations, principally in country areas, throughout Australia. Laboratories are situated in Albury, Alice Springs, Bendigo, Cairns, Canberra, Darwin, Hobart, Kalgoorlie, Launceston, Lismore, Port Pirie, Rockhampton, Tamworth, Toowoomba and Townsville. Their primary role is to assist medical practitioners in the diagnosis of illness and disease and to provide facilities for investigations into public health and aspects of preventive medicine. During 1974–75, the laboratories carried out approximately 4.5 million pathology tests and investigations in respect of 1.3 million patient requests.

The *Commonwealth Serum Laboratories* (*CSL*) are controlled by the Commonwealth Serum Laboratories Commission, a corporate body established under the *Commonwealth Serum Laboratories Act* 1961. CSL is Australia's leading centre for the production and supply of biological products for human and veterinary use and one of Australia's foremost scientific institutes.

Its main functions are to produce and sell prescribed biological products used for therapeutic purposes and to ensure the supply of prescribed essential biological products in accordance with national health needs. The functions include research and development relating to the range of products in its charter and allied fields and the maintenance of potential production capacity for use in emergencies. The research laboratories and production and storage buildings are located on an 11 hectare site at Parkville, Victoria.

For several decades, CSL has been Australia's chief supplier of biological medicines, insulins, vaccines, penicillins, human blood fractions, BCG and an ever-increasing range of veterinary biological products needed by Australia's sheep, cattle, pig and poultry industries.

In addition, biological research into many kinds of human and veterinary disease is carried out, covering the fields of bacteriology, biochemistry, immunology and virology.

The Laboratories employ more than 1,000 people, including medical officers, veterinarians, bacteriologists, biochemists, physicists, engineers, accountants, laboratory assistants and skilled tradesmen.

The Commonwealth Radiation Laboratory was originally established in 1929 as the Commonwealth Radium Laboratory, and has served from that time as the Australian centre for radiological physics and as custodian of all Australian-owned radium used for medical purposes. The laboratory's functions have expanded over the years to include the physical aspects of the use of X-rays and of other ionising radiations for medical diagnosis and treatment; the distribution of all radiopharmaceuticals used in Australia for medical purposes; the maintenance of facilities for radio-chemical investigation; the assay of radioactive substances in the Australian environment; and the maintenance of a whole-body monitor. National standards for the measurement of X-rays and of radionuclides are also maintained. The laboratory provides assistance in matters relating to protection against ionising radiations and operates a film-badge service to monitor the radiation exposure of those who work with such radiation. The laboratory also provides advice on the hazards associated with the use of microwave and laser radiations. In 1974–75 there were 18,214 deliveries of radiopharmaceuticals, comprising 31 different isotopes, procured for use in medicine and medical research. Of these 16,665 deliveries were obtained from the Australian Atomic Energy Commission. Free issues for medical diagnosis and therapy, supplied for patients throughout Australia, were 932,241, the cost of $2,439,415 being met from the National Welfare Fund. Film badges, numbering 92,132 were processed, assessed, and reported on. The Laboratory also supplied radon to approved hospitals and private practitioners in Australia and New Zealand. In 1974–75, 20,264 millicuries of radon were issued. Administrative costs for 1974–75 were $966,204 and $127,621 was expended on plant and equipment.

The *National Acoustic Laboratories* undertake scientific investigations into hearing and problems associated with noise as it affects individuals. The Laboratories' functions include advice to the Armed Forces and Commonwealth Government Departments and instrumentalities on hearing conservation and the reduction of noise. Audiological services are provided in major centres throughout Australia to assist children, ex-servicemen and pensioners with hearing problems. Hearing aids are supplied and serviced free of charge to persons under 21 years, and to pensioners and their dependants. Hearing aids are also provided and maintained on behalf of Veterans' Affairs and other Commonwealth Government Departments. During 1974–75 the number of new cases examined at the laboratories was 39,649 including 17,304 children, 5,539 repatriation cases, 761 members of the defence forces, 13,150 pensioners and 684 civil aviation referrals; 23,620 calaid hearing aids were fitted and 111,634 were on loan at the end of the year. The cost of supply and maintenance of hearing aids to persons under 21 years and pensioners was $1,722,170. Administrative costs of the laboratories were $3,006,885 and expenditure on plant and equipment $432,884.

The Ultrasonic Institute, established in August 1974, provides research and advisory services on the use of ultrasonic waves for the diagnosis and treatment of disease. The new body continues and expands the work previously undertaken by the Ultrasonics Research Section of the National Acoustic Laboratories. The Institute is made up of four sections—Advanced Techniques, Engineering Research, Echography and Biology.

Commonwealth Government health advisory organisations

The National Health and Medical Research Council advises the Commonwealth Government and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public, and on medical research. It also advises the Commonwealth Government and State Governments on the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition. The Council advises the Commonwealth Minister for Health on the application of funds from the Medical Research Endowment Fund which provides assistance to Commonwealth Government Departments or to a State Department engaged in medical research; to universities for the purpose of medical research; to institutions and persons engaged in medical research and in the training of persons in medical research. The Commonwealth Government makes a triennial appropriation for the Fund, that for 1976 to 1978 being $24,000,000. The secretariat for the Council and its Committees is provided by the Commonwealth Department of Health and is located in Canberra.

The School of Public Health and Tropical Medicine, located at the University of Sydney, provides training in public health, tropical medicine and occupational health for medical graduates and certain undergraduates, in addition to carrying out research and consultative activities in these and allied fields. During 1975, seventeen diplomas were awarded in Public Health and ten in Tropical Medicine and Hygiene. A diploma in Occupational Health was offered for the first time in 1974 and thirteen diplomas were awarded in the first year.

The Institute of Child Health is associated with the School of Public Health and Tropical Medicine at the University of Sydney and with the Royal Alexandra Hospital for Children at Camperdown. Its activities include research into medical and social problems of childhood, undergraduate and postgraduate teaching at the University of Sydney, collaboration with other national and international organisations concerned with child health and disease, and the training of United Nations and Colombo Plan Fellows. Costs of the Institute paid by the Commonwealth Government during 1975–76 were $73,735, for administration and $28,964 for plant and equipment.

The Australian Dental Standards Laboratory, formerly the Commonwealth Bureau of Dental Standards, operates under Section 9 of the *National Health Act* 1953. It is a part of the Commonwealth Department of Health and is concerned with research and testing related to dental and allied materials, instruments and equipment and processes. It assists in the preparation of standards for operation of standards for materials, instruments and equipment by providing technical data for standards prepared in co-operation with the Standards Association of Australia. It provides Chairmen for the Dental Standards Committees. It co-operates with the Australian Dental Association in its program of accreditation of dental products. Its functions include instruction to the dental profession and its auxilliaries on the handling of dental materials and the provisions of a consultative service and testing facilities for the armed services, public instrumentalities, the dental profession and manufacturers and distributors of dental products.

Regular surveys are made of the quality of dental products and the results are made available to the profession. It participates in the preparation of international standards for dental materials. The number of products tested during 1974–75 was 413. These included assessment of deterioration of dental products under tropical conditions. Expenditure on plant and equipment for 1974–75 was $26,402 and administrative expenses, including salaries, were $108,213.

The National Biological Standards Laboratory is responsible for the development of standards for therapeutic goods for human and veterinary use, and for testing such products for compliance with standards thereby ensuring that they are safe, pure, potent and efficacious. Other responsibilities including the inspection of manufacturing premises and the evaluation of new and modified products make it the lynchpin of a uniform national system of control over therapeutic goods.

The laboratory was established within the Commonwealth Department of Health in 1958 under powers provided by the *Therapeutic Substances Act* 1953. The *Therapeutic Goods Act* 1966, proclaimed on 12 November 1970, which repealed the Therapeutic Substances Act, simplified the machinery for creating standards and extended the Commonwealth Government's powers over medical devices, containers and packages for therapeutic goods.

The British Pharmacopoeia, the British Pharmaceutical Codex and the British Veterinary Codex are specified in the Act as primary standards. In addition, the Minister has powers to make orders setting standards for specific types of goods and general classes of goods which are imported, or the subject of interstate trade, or supplied to the Commonwealth Government. Standards developed by the National Biological Standards Laboratory are submitted to a statutory committee, the Therapeutic Goods Standards Committee which advises the Minister on the suitability.

The Laboratory jointly with State officials and the pharmaceutical industry prepares and revises an Australian Code of Good Manufacturing Practice which is the criterion employed by inspectors for the licensing of pharmaceutical manufacturers.

The Laboratory has sections which deal with viral products, bacterial products, pharmaceutical products, antibiotics and pharmacology. Administrative costs for 1975–76 were $2,348,199 and a further $71,620 was expended on plant and equipment.

The Australian Drug Evaluation Committee operates under the *Therapeutic Goods Act* 1966. Its functions are: (a) to make medical and scientific evaluations of such goods for therapeutic use as the Minister for Health refers to it for evaluation; (b) to make medical and scientific evaluations of other goods for therapeutic use if, in the opinion of the Committee, it is desirable that it should do so; and (c) to furnish such advice to the Minister for Health as the Committee considers necessary relating to the importation into, and the distributions within Australia, of goods for therapeutic use that have been the subject of evaluation made by the Committee.

It has the powers to co-opt and seek advice from specialist medical colleges and associations and from the medical and allied professions, drug manufacturers and other sources. During 1974–75, 125 applications for general marketing were received and 40 applications for clinical trials were submitted.

The *Australian Registry of Adverse Reactions to Drugs* was established in 1964 on the recommendation of the Australian Drug Evaluation Committee to provide an early warning system based on reports of reactions to drugs forwarded voluntarily by medical practitioners. To enable more detailed evaluations of reports and increase feedback activities to the medical profession, the *Adverse Drug Reaction Advisory Committee* was formed in May 1970 as a sub-committee of the Australian Drug Evaluation Committee. Other sub-committees have also been formed, the Vaccines Sub-Committee, the Endocrinology Sub-Committee, the Congenital Abnormalities Sub-Committee and the Parenteral Nutrition Sub-Committee. A further sub-committee on Anti-Cancer Drugs is also in the process of being formed.

The Therapeutic Goods Advisory Committee was established in 1974 to consider and advise the Minister for Health on any matters relating to standards applicable to goods for therapeutic use and the administration of the Therapeutic Goods Act.

The National Therapeutic Goods Committee comprises Federal and State representatives. Its function is to make recommendations to the Commonwealth and State Governments on action necessary to bring about co-ordination of legislation and administrative controls on therapeutic goods. Sub-committees have been formed to consider specific matters notably Advertising, Registration and Code of Good Manufacturing Practice.

The Hospital and Allied Services Advisory Council was established by the 1970 Australian Health Ministers Conference to provide advice on the co-ordination of matters connected with hospital and allied services. This Council consists of representatives of each State health and hospital Department or Commission and the Commonwealth Departments of Health and Social Security and the Chairman of the Hospitals and Health Services Commission. The Department of Veterans' Affairs has two representatives with observer status.

Five committees—Computer Committee, Construction Planning Committee, Post graduate Accreditation Committee, Research Committee and Uniform Financial Procedures Committee—were established to assist and advise the Council. There is also, currently, an ad hoc Committee on Nursing Homes.

The Hospitals and Health Services Commission was formally established on 10 April 1974 to ascertain health care needs and to make recommendations to the Commonwealth Government concerning health care delivery systems, funds to be allocated for these systems, the education of health personnel, the accreditation of services and financial assistance to be made available to States, Territories, regions, local governments, charitable organisations and other persons. In addition the Commission is to promote and participate in planning in relation to health services. Prior to the formal establishment of the Commission under the *Hospitals and Health Services Commission Act* 1973, an Interim Committee on Hospitals and Health Services had been operating since early in 1973.

In the 1974–75 financial year, the Government approved grants, under the Community Health Program, to the States totalling $27,462,000 as recommended by the Commission, and a further grant of $4,087,000 was approved for the Royal Australian College of General Practitioners to establish a program to train increased numbers of general practitioners to undertake the role of the modern family doctor. In addition, a three-year program of planning and research for health services, totalling $1,025,000 each year, is being implemented by the Commission. The Commission's Reports on Hospitals in Australia, Continuing Medical Education, A Proposal for a Scheme to Accredit Pathology Services in Australia, the Integration of Health Services and Health Education Facilities in the Illawarra Region, and the Australian Health Manpower were tabled in the Parliament in 1974–75.

Commonwealth Government grants to States

Grants for mental health institutions

Final payments under the *States Grants (Mental Health Institutions) Act* 1964 were made in 1973–74. For details of expenditure for the years 1968–69 to 1972–73 *see* Year Book No. 60 1974, page 459. All expenditure is now made under the Community Health and Hospital Construction Programs and is controlled and funded by the Hospital and Health Services Commission.

Paramedical services

The *States Grants (Paramedical Services) Act* 1969 provides for the Commonwealth Government to share on a $1 for $1 basis with participating States the cost of approved paramedical services, such as chiropody, occupational therapy, physiotherapy and speech therapy, provided wholly or mainly for aged persons in their homes. Matching grant payments during 1974–75 amounted to $362,419.

Commonwealth Government grants to organisations associated with public health

In addition to providing the services mentioned on pages 447-59 the Commonwealth Government gives financial assistance to certain organisations concerned with public health. Examples of organisations included in this category are given in the following text.

The Royal Flying Doctor Service is a non-profit organisation providing medical services in remote areas of Australia. It is distinct from, but co-ordinates with, the Aerial Medical Services operated by the Commonwealth Department of Health from Darwin, Gove and Alice Springs in the Northern Territory. The Royal Flying Doctor Service is financed mostly from donations and government contributions. For the triennium ended 30 June 1977, the Commonwealth Government has approved grants totalling $2,100,000 towards operational costs and matching assistance of up to $800,000 towards an approved program of capital expenditure. Actual payments during 1974–75 amounted to $700,000 towards operating costs and $102,233 for capital expenditure. In addition payments of $547,492 have been made up to 30 June 1975, for the cost of the changeover of radio base stations to single sideband operation. The Service made 4,181 flights during 1974–75, travelled 1,976,241 miles and transported 6,034 patients. In the same period medical staff conducted a total of 94,650 consultations and dental treatment was given to 2,327 patients.

The Red Cross Blood Transfusion Service is conducted by the Australian Red Cross Society throughout Australia. The operating costs of the Service in the States are met by the State Governments paying 60 per cent; the Commonwealth Government 35 per cent; and the Society 5 per cent. In the Northern Territory and Australian Capital Territory the Commonwealth Government pays 95 per cent and the Society 5 per cent. Under arrangements effective from 1 July 1975, approved capital expenditure by the Service in the States will be shared on a $1 per $1 basis with the States and in the Territories will be met by the Commonwealth. In 1975–76 the amounts estimated to be paid by the Commonwealth are $160,000 in the States and $80,000 in the Territories. Commonwealth Government expenditure for each State and Territory, during 1974–75 was as follows: New South Wales, $590,000; Victoria, $642,484; Queensland, $415,742; South Australia, $364,388; Western Australia, $358,106; Tasmania, $57,280; Northern Territory, $86,500; and the Australian Capital Territory, $88,500, making a total of $2,603,000.

The *National Heart Foundation of Australia* is a private national organisation established to promote research in cardiovascular disease, to rehabilitate heart sufferers and to foster the dissemination of information about heart diseases. The foundation was formed in 1960 as a result of a public appeal yielding $5 million to which the Commonwealth Government contributed $20,000. A further appeal in 1969 raised $1.6 million and the Foundation now has an annual income from public donations of over $1,200,000. Expenditure in 1975 came to $1,800,000 of which almost half was devoted to supporting research into cardiovascular disease. This is the single most important function of the Foundation and from its inception to the end of 1975 it has allocated well over $7 million for grants-in-aid towards research in university departments, hospitals and research institutes; research fellowships tenable in Australia and overseas; and overseas travel grants for study purposes.

The *World Health Organisation* (WHO), founded during 1948, is a specialised agency of the United Nations having as its objective the attainment by all peoples of the highest level of health. It functions as the directing and co-ordinating authority in international health work; provides consultative and technical assistance to governments and special groups; examines all aspects of health including preventive and curative medicine and research; sets international standards with respect to food, biological, pharmaceutical and similar products; and determines regulations for the control of quarantinable diseases. The organs of WHO are the World Health Assembly and the six Regional Committees which meet annually and the Executive Board which meets twice a year. Australia is assigned to the Western Pacific Region the headquarters of which is at Manila, and was represented at both the 28th World Health Assembly in Geneva in May 1975 and the Regional Committee Meeting in Manila, Philippines in September 1975. Australia's contribution to WHO for 1974–75 was $A1,082,554.

The *International Agency for Research on Cancer* was established by the 18th World Health Assembly in 1965 within the framework of the World Health Organisation. The headquarters of the Agency are located in Lyon, France. The objectives and functions of the Agency are the provision for planning, promoting and developing research in all phases of the causation, treatment and prevention of cancer; collection and dissemination of information on epidemiology and cancer research throughout the world; education and training of personnel for cancer research; and the encouragement of, and assistance at national level if necessary by the direct establishment of, research organisations. Participation in the Agency is subject to membership of the World Health Organisation and, at the determination of the Governing Council, the ability of the State to contribute effectively to the scientific and technical work of the Agency. Australia became a Participating State within a few months after the establishment of the Agency. At present there are 10 Participating States namely: Australia, Belgium, France, the Federal Republic of Germany, Italy, Japan, The Netherlands, The Union of Soviet Socialist Republics, the United Kingdom and the United States of America. Australia's contribution to the I.A.R.C. for 1974–75 was $A154,518.

STATE GOVERNMENT ACTIVITIES

(Includes activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory)

Public health legislation and administration

For a comprehensive account of the administration of health services in each State, the Northern Territory and the Australian Capital Territory, *see* the annual reports of the respective Departments of Health. For details of legislation and administrative changes in previous years *see* earlier issues of the Year Book. The following paragraphs refer briefly to recent developments.

In *New South Wales*, the Therapeutic Goods and Cosmetics (Amendment) Act, 1974 contains provisions to regulate representations that may be made in advertisements in respect of therapeutic goods and articles of food.

The Dental Technicians Registration Act, 1975 contains proposals to constitute a Dental Technicians Registration Board and to make provisions for the registration of dental technicians.

The Public Health (Amendment) Act, 1975 dissolved the advisory Board of Health and contains provisions for regulating the use of dangerous substances.

In *Victoria*, the *Pharmacists Act*, 1974 provides for the registration of pharmacists and control of the practice of pharmacy.

The *Health (Contraceptives) Act*, 1974 was introduced to establish a form of control over the sale and advertising of contraceptives.

The *Optometrists Act*, 1975 changed the title of the *Opticians Registration Act*, 1958 to the *Optometrists Registration Act*, 1958. The Act also reconstitutes the Board and provides for the payment of fees to members of the Board; enables the Board to recognize overseas qualifications and reduces minimum age requirements for registration; regulates advertising by optometrists; restricts ownership and control of optometrical practices; and increases the maximum level for fee fixing and increases penalties for contraventions of the Act.

In *Queensland*, the *Mental Health Act*, 1974 replaced *The Mental Health Acts* 1962 to 1964. The Mental Health Review Tribunal was enlarged and given wider powers of review of patients. Legal distinction was made between psychiatric hospitals (for the mentally ill) and training centres (for the intellectually handicapped).

The Sale of Human Blood Act 1974 prohibits unauthorized trading in human blood.

The *Optometrists Act Amendment Act* 1974 consolidated and updated previous legislation for the control of optometry.

The *Chiropodists Act Amendment Act* 1975 enabled the Chiropodists Board of Queensland to register persons registered in other States, who did not have the qualifications previously required by the Act.

The *Health Act Amendment Act* 1975 clarified the powers of local authorities in respect to collection, storage, transport and disposal of all types of refuse and nightsoil. Other provisions of the Health Act were upgraded and regulation making powers of the Director-General of Health and Medical Services were clarified. Penalty provisions were upgraded.

In *South Australia* the *Occupational Therapists Act*, 1974 provided for the registration of practising occupational therapists.

The *Psychological Practices Act*, 1974 provided for the registration of psychologists.

The *Transplantation of Human Tissue Act*, 1974 provided for the removal of human tissues from deceased persons.

In *Western Australia* the *Alcohol and Drug Authority Act*, 1974 set up an authority to treat persons suffering from alcohol and drug abuse and to promote and subsidise research and educational facilities directed at prevention and treatment of alcohol and drug abuse.

The *Health Act Amendment Act*, 1975 increased fees for sanitary rate for lodging houses and offensive trades; and deemed excessive amounts of carbon monoxide in garages a nuisance under the Act.

The *Radiation Safety Act* 1975 regulates the keeping and use of radioactive substances, irradiating apparatus and certain electronic products.

The *Pharmacy Act Amendment Act* 1975 related to the qualifications, codes of practice and legal standing of pharmaceutical chemists.

The *Hospitals Act Amendment Act* 1975 restrains a medical practitioner from charging a fee for service rendered at a recognized hospital as defined under the Commonwealth *Health Insurance Act*, 1973.

In the *Northern Territory*, the *Hospital Advisory Boards Ordinance Amendment*, 1974, provides for payments to members of the boards.

The *Trading in Blood (Prohibition) Ordinance*, 1974, prohibits unauthorized trading in human blood.

The *Nurses Registration Ordinance* 1974 provides for the enrolment and training of nursing aides in the Territory.

The *Caravan Parks Ordinance* 1975 provides for the maintenance of certain health standards in caravan parks.

The *Hospital and Medical Services (Charges) Regulations Amendment* 1975 provides for charges on actual cost basis for in-patients covered by compensation insurance.

In the *Australian Capital Territory*, the Health Commission Ordinance which came into effect on 1 July 1975, established the Capital Territory Health Commission to control activities previously the responsibility of the Canberra Hospitals Management Board (now abolished) and the A.C.T. Health Services Branch of the Commonwealth Department of Health.

The *Public Health (Prohibited Drugs) Ordinance* 1975 reduced the penalty for use and possession of less than 25 grams of cannabis to a fine not exceeding $100.

Supervision and care of infant life

Because the health of mothers and infants depends largely on pre-natal care as well as after-care, government, local government and private organisations provide instruction and treatment for mothers before and after confinement. The health and well-being of mother and child are looked after by infant welfare centres, baby clinics, crèches, etc.

In all States, Acts have been passed with the object of supervising the conditions of infant life and reducing the rate of mortality. (Information about infant mortality will be found in Chapter 8, Vital Statistics.) Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons.

Under the provisions of the *Social Services Act* 1947 maternity allowances provide financial assistance towards the expenses associated with the birth of children. Information about maternity allowances is given in Chapter 13, Social Security and Welfare Services.

Nursing activities

Several State Governments maintain centres which provide advice and treatment for mothers and children and, in addition, subsidies are granted to various associations engaged in welfare work.

Infant welfare centres. The following table gives particulars of the activities of infant welfare centres for the latest available year in each State and Territory. The figures relate to all centres, whether permanently staffed or on a temporary or part-time basis. Centres may be located at accommodation specially provided for this purpose, or may be conducted in temporary premises in halls, schools, etc.

INFANT WELFARE CENTRES

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
	1973	1975	1974–75	1973–74	1975	1975	1973–74	1974–75
Number of centres(*a*)	444	763	295	303	98	110	19	51
Attendances at centres—								
Pre-natal	21,847	9,477	9,460	9,264	2,629	2,646	n.a.	. .
Post-natal — Number of children	1,213,820	1,389,833	554,385	294,220	263,163	140,850	34,998	83,060
Nurses' home-visits(*b*)	31,602	153,575	4,668	34,768	37,641	60,011	7,980	15,115
Nurses hospital-visits(*c*)	65,229	28,824	26,689	n.a.	19,190	10.350	2,102	. .

(*a*) At end of year shown. (*b*) Pre- and post-natal. (*c*) Post-natal.

Mobile units are used to service centres in some States. The numbers of units and centres served, included in the above table, were as follows: Victoria, 4 and 15; Queensland, 9 and 73; South Australia 5 and 40; Western Australia, 5 and 30. The number of centres for Tasmania includes 14 areas visited by sisters in cars.

Since 1930, the number of attendances at the infant welfare centres has increased more than four-fold. The numbers of attendances at ten year intervals since 1930 were as follows: 1930, 919,893; 1940, 2,035,299; 1950, 3,049,375; 1960, 3,482,383; and 1970, 4,010,906.

Bush Nursing Associations. Treatment for mothers and children is also provided by the Bush Nursing Associations. The numbers of centres maintained by the Associations for the years shown in the above table were: Victoria, 59; Queensland, 5; South Australia, 45; and Western Australia, 13. In New South Wales the Bush Nursing Service has been absorbed into the Community Health Program and in Tasmania, all of the district nursing centres have been taken over by the nearest public hospital and are no longer distinct entities.

Medical and dental inspection of school children

Medical and dental inspection of school children is carried out in all States under the control of State health departments in the Northern Territory under the control of the Commonwealth Department of Health and in the Australian Capital Territory by the Capital Territory Health Commission. The school health services are available to both government and non-government schools in metropolitan areas larger country towns and, in most States, to children attending schools in more remote country areas.

The aim of the school medical services is to medically examine all children at least once during their school careers, usually on entry into primary school. Review examinations or, in some States, tests of vision and hearing by school nurses, are conducted in upper-primary and lower-secondary grades. Parents or guardians are notified of any departure from normal health and advised to seek further attention if necessary.

The aim of the school dental services is to examine and give regular dental treatment to children. Usually, acceptance for treatment is limited to children in primary schools. Some school children are treated at hospital dental clinics. Aboriginal missions and orphanages are also visited by school dentists. The consent of a parent or guardian is necessary before treatment can be given. In some States, priority is given to children who live in areas beyond the easy reach of other dental services. Treatment in remote areas is facilitated by the use of travelling dental clinics.

The following table summarises school health services for the latest available year in each State and Territory.

SCHOOL HEALTH SERVICES

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
	1973	1973–74	1974–75	1974	1975	1975	1973–74	1975
School medical services—								
Staff(*a*)—								
Medical officers	70	45	6	12	11	18	4	3
School nurses	100	54	34	21	59	34	18	7
Medical examinations—								
Children examined	323,856	232,107	(*h*)96,074	(*c*)85,642	88,048	(*c*)30,127	22,463	28,148
Found with defects	26,372	18,932	(*d*)7,111	(*c*)12,257	13,127	5,360	3,747	2,455
School dental services—								
Number of dental clinics—								
Stationary	14	3	2	33	39	34	n.a.	48
Mobile	(*e*)19	11	(*f*)4	7	3	27	n.a.	..
Staff(*a*)—								
Dental officers	31	26	19	33	40	28	n.a.	16
Dental assistants, therapists and nurses	49	34	10	78	84	58	n.a.	52
Dental examinations—								
Children examined	89,916	24,903	(*g*)20,141	37,602	33,395	50,516	25,594	25,952
Number treated	23,208	20,157	(*g*)20,141	33,684	n.a.	n.a.	n.a.	n.a.

(*a*) Full-time and part-time. (*h*) Includes pre-school children. (*c*) Excludes some children treated for hearing and vision by school sisters. (*d*) Number of defects found. Includes defects found in pre-school children. (*e*) There is also a dental team with the Royal Flying Doctor Service (based at Broken Hill). (*f*) In addition, portable dental equipment is possessed by 14 dental officers who function from departmental vehicles. (*g*) Only children who reside in more remote areas. From 1974–75, all children examined receive preventative treatment.

HOSPITALS, NOTIFIABLE DISEASES AND CREMATIONS

Public and Private Hospitals and Nursing Homes

The ABS no longer publishes Australia-wide details of these institutions. Information is published in the Annual Reports of the Department of Social Security. Some limited State information is published by State offices of the ABS.

Repatriation hospitals

The medical care of eligible veterans and dependants of deceased veterans is a major function of the Department of Veterans' Affairs, which provides a comprehensive service.

In-patient treatment is provided at the six Repatriation General Hospitals (one in each State) and at seven auxiliary hospitals and sanatoria. In-patient treatment may also be provided in country hospitals at the Department's expense in certain circumstances. Mental patients requiring custodial care are, by agreement with the State Governments, accommodated at the expense of the Department in mental hospitals administered by the State authorities.

Details of patients, staff and expenditure on Repatriation institutions and other medical services are given in Chapter 5, Repatriation.

Hansenide hospitals

There are three isolation hospitals in Australia for the care and treatment of persons suffering from Hansens' disease (leprosy). The numbers of isolation patients at these hospitals at 31 December were: Little Bay, New South Wales, 2 in 1974; Fairfield, Victoria, 4 in 1975; and Derby, Western Australia, 23 in 1975.

In Queensland, leprosy sufferers are treated in a special isolation ward at Princess Alexandra Hospital (Brisbane), the leprosy annex of the Palm Island Hospital and also at a number of other hospitals which do not have facilities set aside specifically for leprosy patients. There were 8 in-patients at 31 December 1975.

In the Northern Territory at 31 December 1975 there were approximately 20 in-patients for the care and repair of deformity as distinct from the purpose of isolation.

Mental health institutions

The presentation of meaningful statistics of mental health services has become increasingly difficult because of changes in recent years in the institutions and services for the care of mental patients. The emphasis has shifted from institutions for care of patients certified insane to a range of mental health services provided for in-patients and out-patients at psychiatric hospitals, admission and reception centres, day hospitals, out-patient clinics, training centres, homes for the mentally retarded and geriatric patients, psychiatric units in general hospitals, and the like.

In-patient institutions

The following table shows the number of major in-patient institutions in each State in 1974, the accommodation they provide for patients, and staff. In-patient care for voluntary patients is also provided at many general public and a number of private hospitals. There are also psychiatric units attached to gaols, juvenile corrective centres and similar institutions. Only the following institutions, under the control of the State mental health authorities, are included in this table: *New South Wales*—the sixteen State psychiatric centres (a psychiatric hospital and associated admission centre being regarded as one psychiatric centre) and the seven authorised private psychiatric hospitals; *Victoria*—the eight pyschiatric hospitals, eleven mental hospitals eight informal hospitals, four alcoholism and drug assessment and treatment centres, and ten intellectual deficiency training centres three of which are informal; *Queensland*—six psychiatric hospitals; *South Australia*—six in-patient institutions; *Western Australia*—the four approved mental hospitals and two training centres; and *Tasmania*—the Royal Derwent hospital.

MENTAL HEALTH: IN-PATIENT INSTITUTIONS, ACCOMMODATION AND STAFF
1973-74

	N.S.W.	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas*
In-patient institutions	23	(*b*)41	6	6	6	1
Beds and cots for patients	n.a.	(*c*)8,627	3,180	2,250	1,336	1,000
Staff—Medical	n.a.	(*a*)148	(*d*)60	65	34	17
Nursing(*e*)	n.a.	3,441	1,522	917	910	384

(*a*) 1972-73. (*b*) At 30 November 1974. (*c*) The number of beds and cots occupied on 30 November 1974. (*d*) Includes a number of part-time staff. (*e*) Includes attendants.

There are no separate in-patient institutions for mental patients in the Northern Territory or the Australian Capital Territory. With the appointment of a Director of Psychiatric Services the organisation of a psychiatric service was begun in the Australian Capital Territory in 1967-68.

Patients

The following table sets out statistics of in-patients under the care of the respective State mental health services.

IN-PATIENTS AT MENTAL HEALTH INSTITUTIONS, 1973-74

	N.S.W.	*Vic.(a)*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
In-patients at beginning of year—							
Males	5,236	5,189	2,126	1,148	1,511	463	15,673
Females	3,684	4,447	1,194	1,060	1,176	438	11,999
Persons	8,920	9,636	3,320	2,208	2,687	901	27,672
Admissions and re-admissions during year—							
Males	13,249	6,298	1,688	1,758	1,603	558	25,154
Females	10,370	6,258	675	1,551	1,304	306	20,464
Persons	23,619	12,556	2,363	3,309	2,907	864	45,618
Total in-patients (cases) treated—							
Males	18,485	11,487	3,814	2,906	3,114	1,021	40,827
Females	14,054	10,705	1,869	2,611	2,480	744	32,463
Persons	32,539	22,192	5,683	5,517	5,594	1,765	73,290
Discharges, including deaths—							
Males	13,486	6,368	1,651	1,695	1,654	557	25,411
Females	10,534	6,302	694	1,535	1,328	303	20,696
Persons	24,020	12,670	2,345	3,230	2,982	860	46,107
In-patients at end of year—							
Males	4,999	5,119	2,163	1,109	1,460	464	15,314
Females	3,520	4,403	1,175	1,014	1,152	441	11,705
Persons	8,519	9,522	3,338	2,123	2,612	905	27,019

(*a*) 30 November 1974.

Notifiable diseases

Methods of prevention and control

Provision exists in the Health Acts of all States for the compulsory notification of certain infectious and other diseases and for the application of preventive measures. When any such disease occurs the local authority must be notified at once, and in some States notification must be made also to the Health Department.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State on the health, cleanliness and general sanitary state of their several districts and on the appearance of certain diseases. Regulations provide for the disinfection and cleansing of premises and for the disinfection or destruction of bedding, clothing or other articles which have been exposed to infection. Regulations also provide that persons suspected to be suffering from, or to be carriers of, infectious disease must submit to clinical and laboratory examination. Persons suffering from certain diseases, for example, smallpox, are detained in isolation.

Notifiable diseases and cases notified, 1975

The following table shows, by State and Territory, the number of cases notified in 1975 for those diseases notifiable in all States and Territories. In May 1965 the National Health and Medical Research Council at its Fifty-ninth Session proposed a basic list of diseases to be notifiable in each State and Territory, and this table is based upon that proposal. The table does not include all diseases which are notifiable in a State or Territory. Factors such as the following affect both the completeness of the figures and the comparability from State to State and from year to year: availability of medical and diagnostic services; varying degrees of attention to notification of diseases; and enforcement and follow-up of notifications by Health Departments.

NOTIFIABLE DISEASES(*a*): NUMBER OF CASES NOTIFIED, 1975

Disease	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Anthrax . . .	..	2	..	..	..	..	..	..	2
Brucellosis . .	29	41	4	4	1	..	..	..	79
Diphtheria . .	7	..	15	..	..	..	..	..	22
Gonorrhoea . .	3,517	2,242	1,718	2,114	1,977	172	494	67	12,301
Hansen's disease (leprosy) . .	..	4	3	1	15	..	6	..	29
Hepatitis, infective .	880	643	514	203	258	165	138	22	2,823
Hydatid . . .	6	2	2	4	..	4	..	..	18
Leptospirosis . .	2	18	11	1	2	..	..	..	34
Malaria . . .	36	48	68	24	22	..	37	14	249
Ornithosis. . .	1	2	..	1	..	..	..	..	4
Poliomyelitis . .	..	..	1	..	..	..	..	..	1
Syphillis . . .	304	177	482	305	657	2	438	12	2,377
Tetanus . . .	1	4	6	..	..	..	..	..	11
Tuberculosis . .	549	306	216	101	141	34	30	24	1,401
Typhoid fever . .	2	10	..	2	..	..	..	..	14
Typhus (all forms) .	..	..	3	..	..	..	..	..	3

(*a*) No cases of cholera, plague, smallpox or yellow fever were notified.

New infectious hepatitis cases notified. The following table shows the number of cases of infectious hepatitis notified during recent years.

INFECTIOUS HEPATITIS: CASES NOTIFIED

State or Territory	*1971*	*1972*	*1973*	*1974*	*1975*
New South Wales . . .	2,615	2,211	1,460	1,309	880
Victoria.	1,895	1,226	993	768	643
Queensland(*a*) . . .	1,258	1,379	793	536	514
South Australia . . .	504	630	319	193	203
Western Australia . . .	554	389	473	247	258
Tasmania	287	93	40	43	165
Northern Territory . .	296	133	236	168	138
Australian Capital Territory .	100	57	44	25	22
Australia . . .	**7,509**	**6,118**	**4,358**	**3,289**	**2,823**

(*a*) Includes hepatitis, serum (homologous).

New tuberculosis cases notified. The following table gives particulars of the number of new cases of tuberculosis notified in Australia for 1975.

TUBERCULOSIS: NEW CASES NOTIFIED(*a*), 1975

	Age group (years)					
State or Territory	*0–14*	*15–34*	*35–54*	*55 and over*	*Not stated*	*Total*
New South Wales	38	88	190	233	. .	549
Victoria	32	55	89	115	. .	291
Queensland	10	20	65	104	1	200
South Australia	20	19	22	41	. .	102
Western Australia	12	26	41	41	1	121
Tasmania	1	9	8	18	. .	36
Northern Territory	4	5	12	9	. .	30
Australian Capital Territory	3	5	9	1	. .	18
Australia	**120**	**227**	**436**	**562**	**2**	**1,347**

(*a*) Figures supplied by the Director of Tuberculosis in each State and the Commonwealth Department of Health.

Chronic illnesses, injuries, and impairments

As part of the quarterly population survey (*see* Chapter 20, Employment and Unemployment) surveys were conducted in May 1968, in all States except Victoria and in May 1974 for the whole of Australia in order to obtain estimates of the incidence of chronic illnesses, injuries and impairments in the population, the nature of these conditions and their cause (e.g. whether they were congenital or due to war, accident, etc.). In addition, the survey obtained information on the effect of these conditions on the activities of those who suffered from them.

Estimates derived from the survey were published in the mimeographed bulletin *Chronic Illnesses Injuries and Impairments* for May 1968 and May 1974. (17.3)

Cremation

The first crematorium in Australia was opened in South Australia in 1903. At 31 December 1975 there were thirty-three crematoria in Australia, situated as follows: New South Wales, 16; Victoria, 4; Queensland, 6; South Australia, 2; Western Australia, 2; Tasmania, 2; Australian Capital Territory, 1. There is no crematorium in the Northern Territory. The following table shows the number of cremations and total deaths in each State and Territory for each of the years 1970 to 1974.

CREMATIONS AND TOTAL DEATHS(*a*)

	1970		*1971*		*1972*		*1973*		*1974*	
State or Territory	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*	*Cremations*	*Total deaths*
New South Wales	20,087	43,601	19,966	41,691	20,117	41,652	19,991	41,122	21,514	43,999
Victoria	11,265	30,335	11,134	30,598	11,226	29,856	11,677	30,696	11,841	30,875
Queensland	6,303	17,055	6,203	16,339	6,269	16,598	6,697	16,732	7,568	18,128
South Australia	2,884	10,138	2,917	9,686	3,182	9,764	3,402	9,835	3,579	10,236
Western Australia	2,826	7,543	2,996	7,806	3,013	7,441	3,387	7,845	3,359	7,778
Tasmania	1,039	3,174	1,157	3,295	1,135	3,227	1,205	3,347	1,294	3,484
Northern Territory	. .	608	. .	637	. .	553	. .	580	. .	575
Australian Capital Territory	338	594	341	598	374	669	365	665	474	758
Australia	**44,742**	**113,048**	**44,714**	**110,650**	**45,316**	**109,760**	**46,724**	**110,822**	**49.629**	**115,833**

(*a*) Cremations are not necessarily carried out in the State or Territory where the death was registered.

CHAPTER 15

LAW, ORDER, AND PUBLIC SAFETY

This chapter provides summary information about criminal and civil court proceedings (including bankruptcy); selected crime reported or becoming known to the police; police strengths; prisons; expenditure on law and order; fire brigades; and patents, trademarks and copyright. The main sources of further information for individual States are the State Year Books and Annual Statistical bulletins, and the annual reports of the relevant justice authorities. *See also* Year Book No. 55, 1969, page 456, for short descriptions of the National Safety Council of Australia, lifesaving organisations, the Royal Humane Society and the Order of St John.

The statistics in this chapter are influenced by a number of factors which affect comparability from State to State and from year to year, such as differences in the jurisdiction of courts; changes in the law in particular States and differences in the laws between States; differences in the methods of compiling the statistics (e.g. in respect of persons convicted for more than one offence); the prevailing attitude to laws such as those connected with liquor, vagrancy, gaming, and traffic offences; and the strength and distribution of the police forces.

Details of the development and structure of the State, Territory, and Commonwealth legal systems are given in Year Book No. 55, pages 565–7 and Year Book No. 56, page 441. The only notable changes since then occurred in South Australia and New South Wales. In South Australia the Local Courts Act Amendment Act, 1969 came into operation on 20 August 1970. It provides for the establishment of District Criminal Courts. Provision has been made for the division of the State into districts and for the appointment by the Senior Judge, of judges known as Recorders, to courts in each of these Districts. Under the Act the District Court has the jurisdiction and powers of the Supreme Court in respect of indictable offences except for capital offences and for felonies and misdemeanors where the maximum punishment is imprisonment exceeding ten years.

In New South Wales the Supreme Court Act, 1970 came into operation on 1 July 1972. The Act provides for the concurrent administration of law and equity in the Supreme Court which will have the effect of bringing the New South Wales civil procedure in the Supreme Court in line with the other Australian States which have had concurrent administration from as early as 1876. Equitable reliefs and defences which could formerly only be pleaded in the Supreme Court exercising jurisdiction in equity can now be heard together with common law claims and defences in the one jurisdiction. The general scope of the Act will enable a suitor to obtain by one proceeding, the same ultimate result as he would previously have obtained either by having selected the right jurisdiction or after having been to each jurisdiction in succession. The Law Reform (Law and Equity) Act, 1972, which also commenced on 1 July 1972, provides that if any conflict or variance arises between the rules of equity and common law with reference to the same matter, the rules of equity will prevail. This principle extends, where applicable, to the inferior courts.

Legal aid

The Australian Legal Aid Office was established by the Commonwealth Government in July 1973. It provides a general problem-solving service of legal advice for persons with an element of need. Each person seeking help from the Office is seen by a lawyer, the problem identified and advice given. Further assistance, including assistance in litigation is available in matters arising under Federal law, including family law, to all persons, and in matters arising under State or Federal law to persons for whom the Commonwealth Government has a special responsibility such as those in receipt of social services, Aborigines, ex-servicemen, students and newcomers to Australia. The assistance is provided by lawyers of the Office or by referral to private legal practitioners.

The criteria for the provision of further assistance are, the merit of the applicant's case and the financial position of the applicant that is, whether he satisfies the means and needs test of the Office. In considering the merits, regard is had to all the circumstances, particularly to any advantage the applicant might gain from the provision of assistance and any disadvantage he might suffer if assistance was refused, and the likelihood that the proceedings will be terminated by a decision, settlement or otherwise so as to result in a proper and just advantage to the applicant. The means and needs test is the inability of the applicant to afford the cost of representation in the particular case. A system of contributions by applicants towards the cost of assistance has been in operation since August 1975.

The Office operates in each State and Territory of the Commonwealth. There is a branch office in each of the capital cities. Twenty-five regional offices have been established in suburban and provincial centres. The Office employs some 150 lawyers and 220 supporting administrative staff. Since its inception, the Office has given advice and assistance to over 200,000 people with interviews running at approximately 15,000 per month. During 1975, over 140,000 interviews were conducted.

Lower (magistrates') courts

Particulars of the powers of magistrates, and of special provisions for dealing with juvenile offenders in special courts in the various States and Territories are given in Year Book No. 55, pages 567 to 571. The statistics in the following tables are influenced by the factors listed at the beginning of this chapter and, in particular by differences in the jurisdiction of lower courts in the various States.

Criminal proceedings

The number of charges heard at magistrates' courts in each State and Territory in recent years are given in the following table. The statistics relate to individual offences for which persons were charged, except for Queensland where proceedings against a person for a number of offences at the one hearing are counted as one charge.

MAGISTRATES' COURTS(*a*): CHARGES HEARD(*b*)

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales	390,233	427,560	n.a.	n.a.	n.a.
Victoria	339,019	339,527	370,701	n.a.	n.a.
Queensland(*c*)(*d*)	110,803	110,883	114,063	123,754	125,728
South Australia(*c*)	125,867	123,303	142,689	(*a*)113,829	(*a*)113,097
Western Australia	88,940	101,077	104,001	112,736	122,316
Tasmania	32,880	38,046	43,277	44,890	47,986
Northern Territory	14,695	21,329	22,493	23,821	n.a.
Australian Capital Territory	10,326	11,416	19,071	20,437	21,981
Australia	**1,112,763**	**1,173,141**	**n.a.**	**n.a.**	**n.a.**

(*a*) Includes Children's Court except, from 1973, in South Australia. (*b*) Excludes minor traffic offences settled without court proceedings. (*c*) Year ended 30 June. (*d*) A person charged on several counts at the one hearing is included only once.

Differences between States in the preceding table, and within States over a period of time, are influenced by the large number of traffic offences and the arrangements which have been introduced at various times for dealing with them. Provision exists in the States and the internal Territories for settlement of parking and minor traffic offences by payment of fines without court proceedings. The numbers involved are shown in the next table.

MINOR TRAFFIC OFFENCES SETTLED BY PAYMENT OF FINES WITHOUT COURT PROCEEDINGS

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales	456,798	511,005	588,729	694,697	792,469
Victoria	477,332	544,663	611,106	631,967	672,185
Queensland(*a*)	235,477	257,709	312,029	327,064	382,419
South Australia(*a*)	244,120	277,464	246,184	270,515	340,829
Western Australia	154,307	176,994	200,723	211,913	271,266
Tasmania	62,408	76,062	107,457	n.a.	n.a.
Northern Territory	8,438	10,444	(*b*)7,574	n.a.	n.a.
Australian Capital Territory	5,282	7,229	12,580	12,955	18,589
Australia	**1,644,162**	**1,861,570**	**2,086,382**	**n.a.**	**n.a.**

(*a*) Year ended 30 June. (*b*) During 1972 the duties of Darwin's Council Municipal Inspectors were expanded; in addition there was an alteration to Council By-Laws; these changes resulted in a decrease of minor traffic offence fines for that year.

The following tables show the number of cases dealt with in magistrates' courts in which convictions were made.

CASES AT MAGISTRATES' COURTS(*a*) IN WHICH CONVICTIONS WERE MADE, BY CLASS OF OFFENCE: 1974

Class of offence	*N.S.W.*	*Vic.*	*Qld (b)(c)*	*S.A. (b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Against the person .	n.a.	n.a.	1,166	718	2,097	778	n.a.	248	n.a.
Against property .	n.a.	n.a.	9,252	3,250	18,205	3,913	n.a.	1,551	n.a.
Forgery and offences against the currency .	n.a.	n.a.	..	1	306	271	n.a.	113	n.a.
Against good order .	n.a.	n.a.	36,538	10,787	23,998	2,577	n.a.	999	n.a.
Other(*d*) . . .	n.a.	n.a.	60,570	78,281	64,805	25,725	n.a.	11,633	n.a.
Total	**n.a.**	**n.a.**	**107,526**	**93,037**	**109,411**	**33,264**	**n.a.**	**14,544**	**n.a.**

(*a*) Includes Children's Courts except in South Australia. (*b*) Year ended 30 June. (*c*) A person convicted on several counts at the one hearing is included only once. (*d*) Includes traffic offences other than minor traffic offences settled without court proceedings.

CASES AT MAGISTRATES' COURTS(*a*) IN WHICH CONVICTIONS WERE MADE(*b*)

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales . .	337,563	366,701	n.a.	n.a.	n.a.
Victoria	294,554	291,669	321,261	n.a.	n.a.
Queensland(*c*)(*d*) . . .	91,198	92,650	97,532	105,897	107,526
South Australia(*c*) . .	114,499	110,543	123,063	(*a*)94,068	(*a*)93,037
Western Australia . .	79,899	93,548	95,673	101,972	109,411
Tasmania	26,571	32,031	35,504	32,740	33,264
Northern Territory . .	13,528	20,047	20,095	21,256	n.a.
Australian Capital Territory .	6,620	8,940	14,013	14,330	14,544
Australia . . .	**964,432**	**1,016,129**	**n.a.**	**n.a.**	**n.a.**

(*a*) Includes Children's Courts except, from 1973 in South Australia. (*b*) Excludes minor traffic offences settled without court proceedings. (*c*) Year ended 30 June. (*d*) A person convicted on several counts at the one hearing is included only once.

The number of cases in which convictions for drunkenness were recorded in recent years are given in the following table.

DRUNKENNESS CASES(*a*) IN WHICH CONVICTIONS WERE MADE

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales . .	58,606	58,733	n.a.	n.a.	n.a.
Victoria	25,054	25,820	28,962	n.a.	n.a.
Queensland(*b*)(*c*) . . .	31,259	29,878	30,529	32,530	33,093
South Australia(*b*) . .	9,650	9,365	10,181	(*a*)8,314	(*a*)7,973
Western Australia . .	12,612	16,197	16,379	15,104	16,142
Tasmania	541	716	813	890	1,101
Northern Territory . .	6,675	8,217	8,418	n.a.	n.a.
Australian Capital Territory .	572	393	712	770	680
Australia . . .	**144,969**	**149,319**	**n.a.**	**n.a.**	**n.a.**

(*a*) Includes Children's Court except, from 1973, in South Australia. (*b*) Year ended 30 June. (*c*) A person convicted on several counts at the one hearing is included only once.

Convictions for certain serious offences at lower (magistrates') courts

The figures given in the preceding tables refer to all convictions, and include offences of a technical nature, drunkenness, and minor breaches of good order, which come under the heading of crime in a very different sense from the more serious offences. The following table has therefore been prepared to show convictions at magistrates' courts for offences against the person, offences against property, forgery, and offences against the currency.

CONVICTIONS FOR CERTAIN SERIOUS OFFENCES(*a*) AT MAGISTRATES' COURTS(*b*)

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales	40,642	44,191	n.a.	n.a.	n.a.
Victoria	33,025	34,744	37,881	n.a.	n.a.
Queensland(*c*)(*d*)	7,525	7,373	8,480	9,343	10,418
South Australia(*c*)	7,349	8,040	8,596	(*b*)3,852	(*b*)3,969
Western Australia	15,925	19,776	20,058	20,615	20,608
Tasmania	3,813	5,073	5,811	4,645	4,962
Northern Territory	1,517	1,751	2,013	2,150	n.a.
Australian Capital Territory	729	1,069	1,273	1,707	1,866
Australia	**110,525**	**122,017**	**n.a.**	**n.a.**	**n.a.**

(*a*) Offences against the person, offences against property, forgery, and offences against the currency. (*b*) Includes Children's Courts except, from 1973, in South Australia. (*c*) Year ended 30 June. (*d*) A person convicted on several counts at the one hearing is included only once.

Committals to higher (judges') courts

In the case of other than minor offences a preliminary hearing is held before a stipendiary magistrate or justice of the peace for the purpose of determining whether a *prima facie* case has been made out. If the magistrate or justice of the peace finds that there is a case to answer, the person charged is committed for trial at a higher court. The numbers of such committals are shown in the following tables.

COMMITTALS TO HIGHER COURTS(*a*), BY CLASS OF OFFENCE, 1974

Class of offence	*N.S.W.*	*Vic.*	*Qld (b)(c)*	*S.A. (b)*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Against the person	n.a.	n.a.	559	163	219	182	n.a.	51	n.a.
Against property	n.a.	n.a.	1,301	543	716	525	n.a.	172	n.a.
Forgery and offences against the currency	n.a.	n.a.	..	14	67	77	n.a.	..	n.a.
Against good order	n.a.	n.a.	15	73	43	4	n.a.	1	n.a.
Other	n.a.	n.a.	60	189	21	53	n.a.	31	n.a.
Total	**n.a.**	**n.a.**	**1,935**	**982**	**1,066**	**841**	**n.a.**	**255**	**n.a.**

(*a*) Includes committals from Children's Courts except in South Australia. (*b*) Year ended 30 June. (*c*) A person committed on several counts at the one hearing is included only once.

COMMITTALS TO HIGHER COURTS(*a*)

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales	9,173	11,055	n.a.	n.a.	n.a.
Victoria	6,446	6,710	6,912	n.a.	n.a.
Queensland(*b*)(*c*)	1,733	2,172	2,365	2,193	1,935
South Australia(*b*)	742	873	1,003	(*a*)1,001	(*a*)982
Western Australia	1,270	1,507	893	712	1,066
Tasmania	1,012	1,056	1,418	1,008	841
Northern Territory	151	116	402	408	n.a.
Australian Capital Territory	278	179	336	382	255
Australia	**20,805**	**23,668**	**n.a.**	**n.a.**	**n.a.**

(*a*) Includes committals from Children's Courts except, from 1973, in South Australia. (*b*) Year ended 30 June. (*c*) A person committed on several counts at the one hearing is included only once.

Higher (judges') courts

Higher courts are presided over by a judge, sometimes with a jury. The general jurisdiction of the higher courts in the States and Territories, which for this purpose include District, County and Supreme Courts, includes appeals from the lower courts, cases of serious crime committed for trial or sentence by lower courts, and civil cases involving common law, commercial causes, equity, etc. From 5 January 1975, the *Family Law Act* 1975 superseded the *Matrimonial Causes Act* 1959 and established the Family Court of Australia. The jurisdiction in matrimonial causes under the New Act is exercised by the new court and, at least until it is fully established, concurrently by the Supreme Courts of the various States and Territories. In Western Australia, jurisdiction under the Act will be exercised by the Family Court of Western Australia, when it is established. Details of petitions for and decrees of dissolution, nullity, and judicial separation are shown in Chapter 8, Vital Statistics. Under the *Bankruptcy Act* 1966, the Federal Court of Bankruptcy, the Supreme Courts of New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory, and the Courts of Insolvency in Victoria and South Australia, can deal with bankruptcy cases. However, in practice, the Federal Court deals with bankruptcy cases in New South Wales and Victoria.

Proceedings at higher courts therefore include criminal, civil, divorce, and bankruptcy proceedings. Separate details of all except civil proceedings are given in the following paragraphs.

Criminal proceedings

The statistics in the following tables are influenced by the factors listed in the second paragraph at the beginning of this chapter.

PERSONS CONVICTED(*a*) AT HIGHER COURTS: BY NATURE OF OFFENCE, 1974

Offence	*N.S.W.*	*Vic.*	*Qld(b)*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
Against the person—								
Murder	28		11	8	6	1	4	..
Attempted murder	5		10	..	2	..	7	..
Manslaughter(*c*)	67		17	6	26	8	1	3
Culpable driving	59		12	3	5	..	3	2
Rape	69		35	17	23	6	10	2
Other offences against females	266		121	87	12	35	8	5
Abduction	8		6	..	1	1	..	..
Unnatural offences	62		20	4	3	12	4	..
Abortion and attempt to procure	3		..	..	..	..	..	..
Bigamy	12		..	1	2	..	..	..
Malicious wounding and aggravated assault	260		107	38	28	7	13	7
Common assault	79		6	14	..	12	..	2
Other offences against the person	3		12	42	7	20	7	..
Total, against the person	*921*	*n.a.*	*368*	*220*	*115*	*102*	*57*	*21*
Against property—								
Burglary, breaking and entering	1,041		748	367	101	97	78	31
Robbery and stealing from the person	308		69	40	48	58	5	17
Embezzlement and larceny by servants	194		6	18	21	..	3	..
Other larceny(*d*)	670		64	56	49	..	9	8
Receiving	216		245	15	7	5	1	6
Fraud and false pretences	150		(*e*)23	31	14	17	..	3
Arson	36		29	7	11	6	1	2
Malicious damage	28		23	11	1	2	..	..
Other offences against property	1		2	3	2	..	1	3
Total, against property	*2,644*	*n.a.*	*1,211*	*548*	*254*	*185*	*98*	*70*
Forgery and offences against the currency	46		..	16	4	9	5	1
Against good order	89		2	39	..	..	3	..
Other	94		29	83	63	16	11	2
Grand total	**3,794**	**n.a.**	**1,610**	**906**	**436**	**312**	**174**	**94**

(*a*) A person convicted on several counts at the one hearing is classified according to the most serious offence and is included only once. (*b*) Year ended 30 June. (*c*) Includes causing death by dangerous driving. (*d*) Includes unlawfully using vehicles. (*e*) Includes forgery and uttering.

PERSONS CONVICTED(*a*) AT HIGHER COURTS

State or Territory	*1970*	*1971*	*1972*	*1973*	*1974*
New South Wales	3,804	4,024	4,359	4,088	3,794
Victoria	1,752	1,805	1,817	n.a.	n.a.
Queensland(*b*)	1,402	1,720	1,758	1,812	1,610
South Australia	694	931	964	982	906
Western Australia	693	755	662	357	436
Tasmania	337	401	324	325	312
Northern Territory	87	114	140	205	174
Australian Capital Territory	96	94	121	121	94
Australia	**8,865**	**9,844**	**10,145**	**n.a.**	**n.a.**

(*a*) *See* footnote (*a*) in table above. (*b*) Year ended 30 June.

Capital punishment

There were no executions in Australia in 1974. For a brief account of the law relating to capital punishment in Australia, *see* Year Book No. 55, page 573.

Bankruptcy

For a description of the provisions of the *Bankruptcy Act* 1966, *see* Year Book No. 55, pages 586–7. The Bankruptcy Act was amended in 1970 to remove any obstacle the Act may present to the operation of compositions or schemes of arrangement entered into under State or Territory legislation providing assistance to farmers in respect of their debts.

Bankruptcy proceedings

The following table shows the number of bankruptcies of the various types in each State, together with the disclosed assets and liabilities of the debtors.

BANKRUPTCY PROCEEDINGS, 1974-75

State or Territory			*Sequestration orders and orders for administration of deceased debtors' estates*	*Compositions*	*Deeds of assignment*	*Deeds of arrangement*	*Total*
N.S.W.(*a*)	Number		520	14	36	11	581
	Liabilities	$	10,636,443	424,497	9,269,239	186,879	20,517,058
	Assets	$	4,150,282	282,980	1,692,646	247,033	6,372,941
Vic.	Number		408	22	40	31	501
	Liabilities	$	4,943,920	401,476	3,647,926	1,168,862	10,162,184
	Assets	$	1,444,378	480,935	1,471,085	729,283	4,125,681
Qld	Number		291	6	18	6	321
	Liabilities	$	6,502,546	133,442	1,257,825	522,552	8,416,365
	Assets	$	3,868,164	59,753	962,739	319,736	5,210,392
S.A.	Number		427	3	4	3	437
	Liabilities	$	3,304,232	222,396	410,729	172,453	4,109,810
	Assets	$	1,580,680	111,595	455,285	151,557	2,299,117
W.A.	Number		336	17	28	26	407
	Liabilities	$	7,627,004	486,944	1,136,331	640,234	9,890,513
	Assets	$	1,508,189	117,595	467,935	506,159	2,599,878
Tas.	Number		75	1	2	3	81
	Liabilities	$	636,348	24,515	53,844	50,605	765,312
	Assets	$	279,786	16,602	79,810	79,903	456,101
N.T.	Number		4	..	..	..	4
	Liabilities	$	137,890	..	..	..	137,890
	Assets	$	697,034	..	..	..	697,034
Australia	**Number**		**2,061**	**63**	**128**	**80**	**2,332**
	Liabilities	**$**	**33,788,383**	**1,693,270**	**15,775,894**	**2,741,585**	**53,999,132**
	Assets	**$**	**13,528,513**	**1,069,460**	**5,129,500**	**2,033,671**	**21,761,144**

(*a*) Includes the Australian Capital Territory.

BANKRUPTCY PROCEEDINGS: AUSTRALIA

Year		*Sequestration orders and orders for administration of deceased debtors' estates*	*Compositions*	*Deeds of assignment*	*Deeds of arrangement*	*Total*
1970–71	Number	2,428	64	152	139	2,783
	Liabilities $'000	21,259	849	3,976	4,681	30,765
	Assets $'000	8,868	286	2,947	5,199	17,300
1971–72	Number	2,684	64	153	135	3,036
	Liabilities $'000	29,669	1,036	6,298	3,943	40,946
	Assets $'000	10,243	684	3,377	3,540	17,844
1972–73	Number	2,254	71	160	88	2,573
	Liabilities $'000	18,508	1,591	4,630	2,701	27,430
	Assets $'000	9,231	1,290	2,804	2,133	15,458
1973–74	Number	1,637	54	110	63	1,864
	Liabilities $'000	17,194	1,196	3,569	2,280	24,241
	Assets $'000	5,970	646	2,364	1,307	10,288
1974–75	Number	2,061	63	128	80	2,332
	Liabilities $'000	33,788	1,693	15,776	2,742	53,999
	Assets $'000	13,529	1,069	5,129	2,034	21,761

The High Court of Australia

The High Court of Australia consists of a Chief Justice and six other Justices. Its principal seat is in Sydney, but sittings are held in every State capital as occasion requires. The High Court has both original and appellate jurisdiction. Its original jurisdiction is usually exercised by a single Justice, appellate jurisdiction by at least three Justices. The following table sets out transactions in its original and appellate jurisdiction for 1974 and 1975.

TRANSACTIONS OF THE HIGH COURT OF AUSTRALIA, 1974 AND 1975

Original jurisdiction(a)	*1974*	*1975*	*Appellate jurisdiction*	*1974*	*1975*
Number of writs issued	131	189	Number of appeals—		
Number of causes entered for trial	28	31	Set down for hearing	128	115
Judgments for plaintiffs	7	10	Allowed	33	22
Judgments for defendants	5	4	Dismissed	58	37
Otherwise disposed of	18	16	Otherwise disposed of	22	21
Amounts of judgments	$212,800	$1,806,486			

(a) Some matters dealt with by the High Court neither originate as writs nor are entered as causes.

During 1974 and 1975, respectively, the High Court dealt also with the following: appeals from assessments under the Taxation Assessments Act, 12, 22; taxation appeals remitted to Supreme Court, nil, 1; special cases stated for the opinion of the Full Court, 7, 15; applications for prohibition, etc., 26, 16. The fees collected amounted to $17,414 in 1974 and $18,978 in 1975.

Selected crime reported to Police

The following tables show some details of certain categories of offences reported or becoming known to police. This series, which commenced in 1964, is derived from police records and is based, as far as possible, on definitions and procedural arrangements uniformly determined for all States. During 1973 there were minor changes to the collection procedures and some offence definitions which means that 1973–74 statistics are not strictly comparable with the statistics of previous years. The following explanations are necessary in order to interpret the statistics in this series.

Offences reported or becoming known. All incidents reported or becoming known to the police which are found to constitute offences within the scope of the crimes covered are included. Offences are shown as 'reported or becoming known' in the period during which it has been established that the incident constitutes a crime, not necessarily in the period when the incident occurred. However, the incident is included when the police are satisfied that a crime has been committed, even though it may be established in subsequent proceedings that no crime or a crime of a different nature was committed. As far as possible, the offences are recorded in respect of the State in which the incident occurred, regardless of which police force undertakes investigations or prosecutions, or where an arrest is made. In the case of homicide, assault, robbery, and rape, one offence is counted in respect of each victim, regardless of the number of offenders involved. In the case of breaking and entering, and fraud, etc., one offence is counted for each act or series of directly related acts occurring at the same time and place, and under the same circumstances. Each motor vehicle stolen is counted as constituting a separate offence. Attempted crimes are counted as offences in the appropriate offence category except for attempted murder which is shown separately.

Offences cleared. An offence of the type included in this series is counted as 'cleared' when an information (charge, arrest or summons to appear) has been laid against at least one person involved, for the purpose of bringing an offender before court. However, an offence may also be counted as 'cleared' without an information being laid. This may occur when the offender has received an official caution or has died, has committed suicide, has been committed to a mental institution, or is in another jurisdiction from which extradition is not desired or available, or is serving a sentence; or if there are other obstacles to prosecution, such as diplomatic immunity or that the complainant refuses to prosecute. A clearance is always shown against the classification under which the offence was 'reported', regardless of the nature of the charge laid or changes in the description of an offence due to later information. The entries are made in respect of the year when the offence was 'cleared', whether or not the offence was 'reported' in that or an earlier year.

Persons involved in crimes cleared. This is the sum of the number of persons dealt with in each of the offences shown as 'cleared'. If more than one person is involved in the one offence, each person is counted. If the same person is involved in more than one offence cleared, he is counted separately for each offence. Persons involved are shown against the categories of offences to which an incident was originally allocated, regardless of the actual offences they are charged with. This basis of counting 'persons involved in offences cleared' was adopted to reveal trends in crime participation by persons in various age-groups. The statistics in this series are not directly comparable with statistics of persons charged or convicted in court, or of cases brought before the courts; nor do these statistics reveal the number of offenders in the community.

Offences included in the statistics

Homicide. Separate details are provided for murder, attempted murder (i.e. acts done with intent to murder) and manslaughter (unlawful killing other than murder, and from July 1973 includes manslaughter arising from motor traffic accidents).

Serious assault. This is unlawful attack by one person upon another for the purpose of inflicting severe bodily injury, usually accompanied by the use of a weapon or other means likely to produce death or great bodily harm. Excludes attempted murder, robbery, sexual offences and offences where bodily injury results from negligent acts or omissions. *Uniform interpretation of this definition between States is especially difficult to effect.*

Robbery. Includes situations where the offender uses or threatens to use violence, either immediately before, during or after the time of stealing, to any person or property in order to obtain the thing stolen, or to prevent or overcome resistance to its being stolen. Includes attempts of this nature.

Rape. Includes attempted rape and assault with intent to rape. Excludes unlawful carnal knowledge (i.e. where consent is given, but the girl is below the legal age of consent) and indecent assault.

Breaking and entering. Breaking and entering a building (or entering a building and breaking out) *and* committing or intending to commit a crime. Includes burglaries. Separate details are shown according to the type of building involved, namely, *dwellings* (including all premises normally used for dwelling purposes whether occupied or not, such as the residential parts of hotels, hostels, schools, colleges, clubs and similar institutions; excludes caravans on wheels, tents, etc.); *shops* (including kiosks, service stations, restaurants, bars, non-residential clubs, etc.); and *other buildings* (including parts of buildings, but excluding dwellings and shops used for such purposes) regardless of the value of the property involved.

Motor vehicle thefts, illegal use, etc. Includes all offences of illegal, unlawful or unauthorised use, use without consent, unlawfully assuming control, etc., no matter under which legislation these offences are prescribed. Includes cases where the vehicle is not actually driven away. Excludes cases of 'interference', but includes attempts at illegal use. The number of stolen motor vehicles which are recovered is also shown.

Fraud, forgery, false pretences. Includes all types of fraud, forgery, uttering, falsification of records, false pretences, secret commissions, imposition, fraudulent dealings in goods subject to hire purchase, obtaining credit by fraud, and offences involving false claims, deception, trickery, cheating or breaches of trust. Also included is embezzlement, fraudulent misappropriation, fraudulent conversion and stealing by a bailee, servant or trustee etc. Forgery and or uttering of bank notes is excluded. Separate details are shown for *valueless cheque* offences (i.e. passing of valueless cheques, whether there is no account, insufficient funds or a false signature of the purported drawer of the cheque. However, this sub-group excludes cases where a genuine cheque is altered or the endorsement of the payee is forged. These cases are regarded as forgery and or uttering and included in 'other').

Offences reported or becoming known to police

The following table shows, for each State and Territory, the number of offences in each of the seven categories covered by this series which were reported or became known to police. The table includes offences reported to and investigated by the Commonwealth Police.

SELECTED CRIME REPORTED OR BECOMING KNOWN TO POLICE: NUMBER OF OFFENCES

Category of crime	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Homicide—									
1971–72	131	110	44	35	33	13	10	4	380
1972–73	142	122	76	23	29	18	9	6	425
1973–74(*a*)	252	137	130	45	62	9	14	4	653
Serious assault(*b*)—									
1971–72	828	2,712	224	126	157	21	131	36	4,235
1972–73	877	(*b*)1,942	289	172	112	11	73	40	(*b*)3,516
1973–74	886	(*b*)1,491	178	168	168	22	64	41	(*b*)3,018
Robbery—									
1971–72	1,608	877	213	187	112	48	33	21	3,099
1972–73	1,457	872	302	182	89	51	24	19	2,996
1973–74	1,369	891	294	262	130	46	20	22	3,034
Rape—									
1971–72	184	181	72	61	33	24	16	6	577
1972–73	206	181	88	46	31	16	15	8	591
1973–74	295	209	66	101	31	17	25	9	753
Breaking and entering (dwellings, shops, offices, etc.)—									
1971–72	46,873	38,148	14,333	12,109	8,025	3,060	875	633	124,056
1972–73	42,292	34,988	13,627	12,172	9,631	2,742	734	861	117,047
1973–74	39,832	32,888	13,999	13,352	11,563	2,324	1,055	1,236	116,249
Motor vehicle theft, etc.—									
1971–72	21,112	12,370	4,549	2,990	3,975	1,208	368	349	46,921
1972–73	18,847	11,057	4,739	3,380	4,338	1,148	593	412	44,514
1973–74	20,103	10,953	5,016	4,172	5,214	1,084	677	598	47,817
Fraud, forgery, etc.—									
1971–72	13,459	8,686	6,573	3,488	2,619	843	248	293	36,209
1972–73	12,565	7,898	4,796	3,810	2,670	1,100	358	472	33,669
1973–74	13,915	7,889	5,586	5,964	2,489	777	280	426	37,326

(*a*) For 1973–74, manslaughter includes manslaughter arising from motor traffic accidents. (*b*) Statistics not comparable with earlier years because of changes in interpretation and collection procedures in Victoria.

Crimes cleared and persons involved

The tables which follow show, for the various categories of offences, the numbers of offences reported, the numbers cleared, and the numbers of persons involved according to age and sex. Sub-divisions of the categories homicide, breaking and entering, and fraud, etc., are provided. *See* pages 476–7 for definitions used and the bases on which these statistics are prepared.

HOMICIDE: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED AND PERSONS INVOLVED, AUSTRALIA

	Murder			*Attempted murder*			*Manslaughter*			*All homicide*		
	1971–72	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*
Numbers reported or becoming known .	175	220	226	157	151	161	48	54	266	380	425	653
Numbers cleared .	168	202	209	141	135	151	47	50	260	356	387	620
Persons involved in crimes cleared—												
Aged(*b*)—												
16 years and under	10	7	8	5	5	3	4	1	6	19	13	17
17 and 18 years .	12	12	22	9	10	13	4	10	21	25	32	56
19 and 20 years .	8	11	23	33	13	15	8	5	37	49	29	75
21 years and over	162	212	176	135	119	107	36	46	187	333	377	470
Total persons involved .	**192**	**242**	**229**	**182**	**147**	**138**	**52**	**62**	**(*c*)265**	**(*d*)426**	**(*d*)451**	**(*c*)(*d*)632**

(*a*) From July 1973 includes manslaughter arising from motor traffic accidents. (*b*) Age last birthday at time o clearance. (*c*) Includes 14 persons involved in driving offences occasioning death not included in age distribution. (*d*) Includes 49 females in 1971–72, 54 in 1972–73 and 51 in 1973–74.

SERIOUS ASSAULT, ROBBERY, RAPE: CRIMES REPORTED OR BECOMING KNOWN CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA

	Serious assault			*Robbery*			*Rape*		
	1971–72	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*
Numbers reported or becoming known	4,235	3,516	3,018	3,099	2,996	3,034	577	591	753
Numbers cleared	3,237	2,632	2,029	914	861	800	400	422	418
Persons involved in crimes cleared—									
Aged(*a*)—									
16 years and under . .	470	268	225	278	307	192	48	49	73
17 and 18 years . .	629	419	311	339	313	254	128	93	91
19 and 20 years . .	522	376	262	288	270	199	87	107	92
21 years and over . .	2,337	2,038	1,311	750	683	416	258	309	237
Total persons involved .	**(*b*)3,958**	**(*b*)3,101**	**(*b*)2,109**	**(*c*)1,655**	**(*c*)1,573**	**(*c*)1,061**	**521**	**558**	**493**

(*a*) Age last birthday at time of clearance. (*b*) Includes 77 females in 1971–72, 148 in 1972–73 and 136 in 1973–74. (*c*) Includes 65 females in 1971–72, 75 in 1972–73 and 69 in 1973–74.

BREAKING AND ENTERING(*a*): CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA

	Dwellings			*Shops*			*Other buildings*			*Total*		
	1971–72	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*
Numbers reported or becoming known .	58,311	57,372	60,071	27,054	22,964	22,708	30,217	29,190	33,470	124,056	117,047	116,249
Numbers cleared .	11,246	11,049	12,246	6,721	5,798	5,741	5,259	5,105	5,366	24,113	22,757	23,353
Persons involved in crimes cleared(*b*)—												
Aged—												
16 years and under	10,514	10,025	4,249	5,316	4,713	2,503	5,173	5,454	2,841	21,003	20,192	9,593
17 and 18 years .	2,218	2,409	1,137	2,018	1,822	1,017	1,216	1,098	595	5,452	5,329	2,749
19 and 20 years .	1,129	1,277	487	1,377	972	555	776	613	366	3,282	2,862	1,408
21 years and over	3,713	3,146	1,185	3,154	2,374	1,251	2,108	1,669	844	8,975	7,189	3,280
Total persons involved .	**17,574**	**16,857**	**7,058**	**11,865**	**9,881**	**5,326**	**9,273**	**8,834**	**4,646**	**(*c*)40,053**	**(*c*)36,839**	**(*c*)17,030**

(*a*) Attempts in N.S.W. in 1971–72 and 1972–73 are included in totals only. (*b*) A change in collection procedures affected the numbers in 1973–74. (*c*) Includes 1,047 females in 1971–72, 1,106 in 1972–73 and 661 in 1973–74.

MOTOR VEHICLE THEFT, ETC., FRAUD, ETC.: CRIMES REPORTED OR BECOMING KNOWN, CRIMES CLEARED, AND PERSONS INVOLVED, AUSTRALIA

	Motor vehicle theft, etc.			*Fraud, forgery, false pretences*								
				Valueless cheques			*Other*			*All fraud, etc.*		
	1971–72	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972–73*	*1973–74*	*1971–72*	*1972 73*	*–1973–74*
Numbers reported or becoming known	46,921	44,514	47,814	12,848	11,671	9,564	24,186	20,871	27,960	36,209	33,669	37,326
Numbers cleared	11,389	10,717	n.a.	7,783	7,603	5,708	15,692	14,421	18,831	23,475	22,024	24,539
Persons involved in crimes cleared—												
Males aged(*a*)—												
16 years and under	8,889	8,188	4,788	132	183	83	510	462	355	642	645	438
17 and 18 years	4,629	4,001	2,460	284	324	96	689	714	405	973	1,038	501
19 and 20 years	1,956	1,726	1,067	563	505	129	844	624	365	1,407	1,129	494
21 years and over	3,308	2,717	1,731	6,027	5,586	1,418	10,135	7,780	3,126	16,162	13,366	4,544
Total males	*18,782*	*16,632*	*10,046*	*7,006*	*6,598*	*1,726*	*12,178*	*9,580*	*4,251*	*19,184*	*16,178*	*5,977*
Females aged(*a*)—												
16 years and under	309	245	199	67	29	12	313	208	109	380	237	121
17 and 18 years	100	91	61	50	38	29	521	359	144	571	397	173
19 and 20 years	43	30	19	117	76	29	349	420	135	466	496	164
21 years and over	87	60	39	968	1,012	210	3,104	3.479	812	4,072	4,491	1,022
Total females	*539*	*426*	*318*	*1,202*	*1,155*	*280*	*4,287*	*4,466*	*1,200*	*5,489*	*5,621*	*1,480*
Total persons involved	**19,321**	**17,058**	**10,364**	**8,208**	**7,753**	**2,006**	**16,465**	**14,046**	**5,451**	**24,673**	**21,799**	**7.457**

(*a*) Age last birthday at time of clearance.

The number of stolen motor vehicles recovered was: 1971–72, 43,967; 1972–73, 41,150; 1973–74, 41,830.

Drug offences

Australia is a signatory to the Single Convention of Narcotic Drugs which has as its main aim the limitation of narcotic drugs to legitimate medical and research purposes.

As its name implies, the Single Convention covers only the so-called narcotic drugs. In recognition that there are other drugs of dependence, the member nations met during 1970 and 1971 and drew up a further Convention to impose controls on psychotropic substances such as hallucinogens, amphetamines, other central nervous system stimulants, barbiturates, tranquillisers and certain other sedatives.

Legislative provisions

Regulation 5 of the Customs (Prohibited Imports) Regulations made under Section 50 of the *Customs Act* 1901 provides the legal controls for the importation of narcotic drugs and other drugs of dependence. Under this regulation all importers of these drugs must be licensed and must obtain permission in writing for each importation. Importers are also required to keep these drugs in a secure place and to keep such records as may be required concerning use or disposal.

The penalty on conviction for an offence relating to narcotic goods as defined in the *Customs Act* 1901 is:

(*a*) In a Court of Summary Jurisdiction—

A fine not exceeding $2,000 or imprisonment for a period not exceeding 2 years, or both.

(*b*) On indictment—

A fine not exceeding $4,000 or imprisonment for a period not exceeding 10 years, or both.

The manufacture of narcotic drugs in Australia is controlled under the *Narcotic Drugs Act* 1967. The Act requires that a manufacturer shall be licensed and shall comply with strict conditions and directions relating to such manufacture and the handling of the drugs concerned. Failure to comply with these requirements constitutes an offence against the Act and the penalty upon conviction for such an offence is:

(*a*) In a Court of Summary Jurisdiction—

A fine not exceeding $1,000 or imprisonment for a period not exceeding 2 years, or both.

(*b*) On indictment—

A fine not exceeding $4,000 or imprisonment for a period not exceeding 10 years, or both.

State and Territory legislation relating to the regulation, control and prohibition of the sale, use, possession and administering (including smoking) of poisons, restricted substances, drugs of addiction, dangerous drugs and deleterious substances, is listed below.

New South Wales	Poisons Act, 1966–1975; Summary Offences Act, 1970
Victoria	*Poisons Act* 1962
Queensland	*The Health Acts* 1937 *to* 1974
South Australia	Narcotic and Psychotropic Drugs Act, 1934–74 (formerly Dangerous Drugs Act, 1934–1955); Food and Health Act, 1908–1962; Police Offences Act, 1953–1961
Western Australia . . .	*Police Act, 1892–1967; Poisons Act 1964*
Tasmania	*Dangerous Drugs Act* 1959; *Alcohol and Drug Dependency Act* 1968; *Health Services Act* 1960; *Poisons Act* 1971
Northern Territory . . .	*Dangerous Drugs Ordinance* 1928; *Poison Ordinance* 1924
Australian Capital Territory . .	*Poisons, Dangerous Drugs and Public Health Ordinances* 1933

In some States this legislation also provides for the offence of 'trafficking' (where there is possession of a minimum specified quantity of a prescribed substance, prohibited drug, or drug of addiction, such possession being *prima facie* for the offence), and for the offence of being the owner, lessee, or concerned in the management of any premises used for the purposes of drug abuse such as the smoking of opium or indian hemp. Offences of habitually consorting, etc., with reputed drug offenders are also covered under State legislation.

Since 1970 some States have introduced legislation requiring that stocks of dangerous drugs in pharmacies be stored in heavy metal safes.

All State Governments have agreed to a uniform code of penalties based on those applicable in Commonwealth Government legislation. Some State Governments have already taken the legislative action to implement this decision.

Law enforcement

Law enforcement in respect of drugs is handled by State police forces, the Commonwealth Police Force and the Department of Business and Consumer Affairs. In 1969 a National Standing Control Committee on Drugs of Dependence was established to consider further action by the Commonwealth and States to combat all aspects of the drug problem in Australia and to make recommendations on legislation and administrative action. The Committee is chaired by the Secretary of the Department of Business and Consumer Affairs. The Department administers the Australian Narcotics Bureau and has responsibility for the enforcement of laws controlling importation and exporting of drugs. Membership of the Committee is comprised of senior officers of the Commonwealth and State police and health authorities. Its Deputy Chairman is the Director-General of the Australian Department of Health.

The National Standing Control Committee on Drugs of Dependence recommended that the Australia Crime Intelligence Centre (formerly known as the Central Crime Intelligence Bureau) of the Commonwealth Police Force serve as the national agency for the systematic collection, collation, evaluation and dissemination of information concerning the illicit drug traffic in Australia. During 1974, the fifth complete year for which the Australia Crime Intelligence Centre compiled statistics, 9,179 drug offences, for which 4,850 male and 720 females were prosecuted, were reported to the Centre. Details of the offences and drugs involved are given in the following tables.

PROSECUTIONS AND CONVICTIONS FOR DRUG OFFENCES REPORTED TO THE AUSTRALIAN CRIME INTELLIGENCE CENTRE (COMMONWEALTH POLICE): PERSONS INVOLVED, AUSTRALIA 1974

Age (years)	Number of offenders	Number of individual charges	Convictions on individual charges	Fines imposed		Gaol sentences		Number of bonds granted (a)	Number of charges not proceeded with or dismissed	Number of charges pending
				No.	Amount $	No.	Months			
UNLAWFUL POSSESSION										
Males aged—										
16 and under	132	141	45	21	1,930	..	..	20	10	86
17 and 18	715	785	339	249	59,508	5	38	76	26	420
19 and 20	1,023	1,136	560	441	112,625	41	394	70	19	557
21	338	445	219	164	39,622	25	312	32	5	221
22 and over	1,563	1,795	848	625	170,248	74	650	108	30	917
Total males	*3,771*	*4,302*	*2,011*	*1,500*	*383,933*	*145*	*1,394*	*306*	*90*	*2,201*
Females aged—										
16 and under	38	45	12	3	350	..	..	6	5	28
17 and 18	112	123	50	35	8,330	1	3	17	5	68
19 and 20	155	175	81	58	13,845	2	12	17	6	88
21	43	47	20	13	2,800	1	3	5	1	26
22 and over	169	190	79	48	10,895	2	5	25	12	99
Total females	*517*	*580*	*242*	*157*	*36,220*	*6*	*23*	*70*	*29*	*309*
UNLAWFUL IMPORTS										
Males aged—										
16 and under	..	..	..	..	..	..	..	..	..	..
17 and 18	4	4	1	1	300	..	..	..	..	3
19 and 20	16	19	8	3	450	1	6	1	1	10
21	11	11	5	4	750	..	..	..	1	5
22 and over	102	113	46	29	11,229	12	392	3	1	66
Total males	*133*	*147*	*60*	*37*	*12,729*	*13*	*398*	*4*	*3*	*84*
Females aged—										
16 and under	1	1	..	..	..	..	..	..	..	1
17 and 18	3	3	1	1	400	..	..	..	..	2
19 and 20	8	8	1	1	500	..	..	..	..	7
21	2	2	1	1	150	..	..	..	..	1
22 and over	22	23	8	5	1,450	..	..	3	..	15
Total females	*36*	*37*	*11*	*8*	*2,500*	..	..	*3*	..	*26*
UNLAWFUL USE										
Males aged—										
16 and under	120	122	36	10	775	..	..	23	5	81
17 and 18	483	521	143	101	11,275	4	21	34	20	358
19 and 20	594	643	246	178	24,700	18	114	44	19	378
21	203	219	88	68	9,030	9	48	9	4	127
22 and over	624	673	249	176	22,965	17	74	42	15	409
Total males	*2,024*	*2,178*	*762*	*533*	*68,745*	*48*	*257*	*152*	*63*	*1,353*
Females aged—										
16 and under	49	50	12	1	40	..	..	6	7	31
17 and 18	73	88	22	10	1,182	1	6	13	5	61
19 and 20	84	92	43	28	2,985	2	6	15	3	46
21	24	26	8	5	255	..	..	2	..	18
22 and over	73	77	27	16	1,980	2	18	8	4	46
Total females	*303*	*333*	*112*	*60*	*6,442*	*5*	*30*	*44*	*19*	*202*
THEFT										
Males aged—										
16 and under	1	1	..	..	..	..	..	..	..	1
17 and 18	22	29	14	1	30	2	90	11	..	15
19 and 20	36	45	17	3	400	5	85	4	1	27
21	17	33	8	1	80	5	132	3	..	25
22 and over	61	73	23	5	530	6	140	11	1	49
Total males	*137*	*181*	*62*	*10*	*1,040*	*18*	*447*	*29*	*2*	*117*
Females aged—										
16 and under	2	2	..	..	..	..	..	..	..	2
17 and 18	5	7	3	2	240	1	30	..	..	4
19 and 20	..	..	..	..	..	..	..	..	..	..
21	3	3	..	..	..	..	..	1	..	3
22 and over	9	11	6	3	450	1	3	3	..	5
Total females	*19*	*23*	*9*	*5*	*690*	*2*	*33*	*4*	..	*14*

For footnote *see* next page.

PROSECUTIONS AND CONVICTIONS FOR DRUG OFFENCES REPORTED TO THE AUSTRALIAN CRIME INTELLIGENCE CENTRE (COMMONWEALTH POLICE): PERSONS INVOLVED, AUSTRALIA 1974—*continued*

Age (years)	*Number of offenders*	*Number of individual charges*	*Convictions on individual charges*	*Fines imposed*		*Gaol sentences*		*Number of bonds granted (a)*	*Number of charges not proceeded with or dismissed*	*Number of charges pending*
				No.	*Amount $*	*No.*	*Months*			
				TRAFFICKING						
Males aged—										
16 and under	21	22	6	3	228	1	6	3	2	14
17 and 18	66	75	25	12	2,945	4	61	4	8	42
19 and 20	96	127	49	11	3,119	16	210	7	2	76
21	46	64	38	8	1,900	11	104	2	..	26
22 and over	152	171	36	14	4,250	11	105	8	1	134
Total males	*381*	*459*	*154*	*48*	*12,442*	*43*	*486*	*24*	*13*	*292*
Females aged—										
16 and under	2	2	1	..	..	..	..	1	..	1
17 and 18	6	7	1	..	..	..	..	1	1	5
19 and 20	10	11	5	5	1,100	..	..	..	..	6
21	2	2	..	..	..	..	..	..	..	2
22 and over	16	18	4	1	750	1	3	2	..	14
Total females	*36*	*40*	*11*	*6*	*1,850*	*1*	*3*	*4*	*1*	*28*
				OTHER OFFENCES						
Males aged—										
16 and under	21	22	8	2	200	..	..	5	1	13
17 and 18	113	122	50	42	5.235	2	9	6	2	70
19 and 20	170	193	88	72	13,580	6	72	8	2	103
21	93	109	40	36	7,135	1	6	3	1	68
22 and over	279	354	141	109	24,283	15	69	12	6	207
Total males	*676*	*800*	*327*	*261*	*50,433*	*24*	*156*	*34*	*12*	*461*
Females aged—										
16 and under	6	6	3	..	..	..	..	3	1	2
17 and 18	12	12	5	2	200	1	12	2	1	6
19 and 20	18	21	9	5	810	..	..	1	3	9
21	13	16	9	4	540	2	17	2	..	7
22 and over	33	44	18	9	1,110	1	24	2	..	26
Total females	*82*	*99*	*44*	*20*	*2,660*	*4*	*53*	*10*	*5*	*50*
				TOTAL OFFENCES						
Total males	**7,122**	**8,067**	**3,376**	**2.389**	**529,322**	**291**	**3,138**	**549**	**183**	**4,508**
Total females	**993**	**1,112**	**429**	**256**	**50,362**	**18**	**142**	**135**	**54**	**629**
Total persons	**8,115**	**9,179**	**3,805**	**2,645**	**579,684**	**309**	**3,280**	**684**	**237**	**5,137**

(*a*) Bonds include suspended gaol sentences and/or other recognisances to be of good behaviour for a specific time.

NUMBER OF CHARGES INVOLVING SPECIFIC DRUG TYPES(*a*), 1974

(*Source:* Australian Crime Intelligence Centre (Commonwealth Police))

Type of drug	*Possess*	*Import*	*Use/ administer*	*Traffic*	*Steal*	*False pretences*	*Forge prescription*	*Other*	*Total*	*Percentage of drug group*
Narcotics—										
Cocaine	21	2	13	2	8	..	..	1	47	4.07
Codeine	1	..	..	..	1	..	..	..	2	0.17
Palfium	9	..	32	2	6	29	60	3	141	12.22
Physeptone	22	..	21	33	3	9	23	4	115	9.97
Morphine	97	2	102	7	95	4	1	16	324	28.08
Opium	24	4	12	..	5	..	..	..	45	3.73
Opium (preparations)	4	1	3	..	..	..	..	..	8	0.69
Pethidine	25	..	30	4	36	14	4	5	118	10.23
Omnopon	6	..	4	..	2	..	1	3	16	1.39
Fortral	1	..	1	..	4	1	..	..	7	0.62
Heroin	153	27	94	40	4	..	..	11	329	28.34
Etorphine	1	..	..	..	..	..	..	..	1	0.08
Fentanyl	1	..	..	..	..	..	..	..	1	0.08
Codeine hydrocodone	..	..	..	..	1	..	..	..	1	0.08
Dilaudid	2	..	..	..	..	..	..	..	2	0.17
Phenadoxone	..	..	..	1	..	..	..	..	1	0.08
Total	*367*	*36*	*312*	*89*	*165*	*57*	*89*	*43*	*1,158*	*100.00*
Cannabis—										
Plants	203	..	1	..	..	..	..	92	296	4.12
Seeds	101	10	2	..	..	..	..	5	118	1.64
Marihuana	3,672	99	1,938	331	2	..	..	486	6,528	90.98
Hashish	117	39	19	7	..	..	..	6	188	2.62
Cannabinol	15	2	1	3	..	..	..	2	23	0.32
Liquid hash	17	2	3	1	..	..	..	..	23	0.32
Total	*4,125*	*152*	*1,964*	*342*	*2*	..	..	*591*	*7,176*	*100.00*
Amphetamines—										
Amphetamine	17	2	14	3	..	..	..	2	38	64.42
Dexamphetamine	1	..	..	..	..	..	..	..	1	1.70
Methylamphetamine	5	..	..	..	..	..	..	..	5	15.26
Methylphenidate	1	..	4	..	..	..	..	..	5	1.70
Phenmetrazine	5	..	..	..	..	..	..	..	5	8.46
Ponderax	..	..	2	2	..	..	..	1	5	8.46
Total	*29*	*2*	*20*	*5*	..	..	..	*3*	*59*	*100.00*
Barbiturates/hypnotics—										
Mandrax	44	..	15	6	5	1	2	1	74	71.16
Amylobarbitone	2	..	..	1	..	..	..	..	3	2.89
Butobarbitone	1	..	..	..	..	..	..	..	1	0.97
Pentobarbitone	9	..	5	3	3	..	..	..	20	18.35
Quinalbarbitone	1	..	..	..	1	..	..	..	2	1.93
Nitrazepam	..	..	..	..	1	..	..	..	1	0.97
Other	1	..	..	1	..	..	1	..	3	3.73
Total	*58*	..	*20*	*11*	*10*	*1*	*3*	*1*	*104*	*100.00*
Tranquilisers—										
Valium	15	..	1	..	10	1	4	..	31	91.18
Other	3	..	..	..	..	..	..	..	3	8.82
Total	*18*	..	*1*	..	*10*	*1*	*4*	..	*34*	*100.00*
Hallucinogens—										
L.S.D.	100	5	66	27	..	..	..	2	200	81.30
Psilocybine	31	..	11	..	..	..	..	..	42	17.08
Mescaline	1	..	2	..	..	..	..	..	3	1.22
Other	1	..	..	..	..	..	..	..	1	0.40
Total	*133*	*5*	*79*	*27*	..	..	..	*2*	*246*	*100.00*
Other total	172	2	15	24	40	3	9	23	288	..
Grand total	**4,902**	**197**	**2,410**	**497**	**227**	**62**	**105**	**663**	**9,065**	..
Percentage	*54.08*	*2.16*	*26.60*	*5.50*	*2.50*	*0.69*	*1.16*	*7.31*	*100.00*	..

(*a*) If a number of different drug types are involved in an offence, they are counted under each drug category.

In 1969, the Commonwealth Bureau of Narcotics was created as part of the Government's campaign to combat the increasing incidence of illicit trafficking of drugs in Australia. Now known as the Australian Narcotics Bureau and operating under the Bureau of Customs from within the Department of Business and Consumer Affairs, it is made up of three sections:

Treaties and Secretariat Section—responsible for ensuring that Australia's obligations as a signatory to the various international conventions on drugs are complied with.

International Enforcement and Liaison—responsible for maintaining an effective system for the exchange of information with overseas law enforcement agencies concerned with the suppression of illicit trafficking in drugs.

National Enforcement—responsible for the prevention of, and investigations into, illegal importation, exportation, and major trafficking of drugs. Its activities are concentrated in co-ordinated operations against importers and major distributors.

The following table shows the types of drugs and amounts seized by the Bureau of Customs (previously the Department of Customs and Excise) in recent years.

DRUG SEIZURES BY THE BUREAU OF CUSTOMS

Type of drug	*Unit*	*1971*	*1972*	*1973*	*1974*	*1975*
Amphetamines	gram	18	79	50	655	165
	tablet	1,421	493	127	..	..
Barbiturates	gram	22	37	..	172	262
	tablet	287	1,050	265	..	..
Cannabis	gram	178,654	541,929	1,107,189	287,506	885,476
Cannabis oil	gram	..	..	..	4,809	32,859
Cocaine	gram	4	198	121	47	338
	tablet	9	..	..	..	..
L.S.D.	dosage unit	21,676	69,863	23,442	5,505	9,131
Narcotics—						
Opium	gram	6,094	2,746	3,020	5,700	4,861
Heroin	gram	2,468	2,018	3,116	5,079	5,938
Morphine	gram	31	158	1,536	279	863
	ampoule	6	16	2	..	..
	tablet	2	..	..	..	..
Pethidine	tablet/ampoule	6	43	51	..	..

The number of offenders charged with drug offences by the Bureau of Customs and the sentences imposed are given in the following table. Particulars of all drug offences in 1974 reported to the Australian Crime Intelligence Centre are shown in the table on pages 481–2.

PROSECUTIONS AND CONVICTIONS UNDER THE CUSTOMS ACT AND THE NARCOTIC DRUGS ACT FOR OFFENCES INVOLVING DRUGS OF DEPENDENCE

(*Source:* Bureau of Customs)

Offence and year	*Number of offenders*	*Number of individual charges*	*Convictions on individual charges*	*Fines imposed*		*Gaol sentences*		*Number of bonds granted (a)*	*Number of charges not proceeded with or dismissed*	*Offence proven without conviction*	*Number of charges pending*
				No.	*Amount*	*No.*	*Months*				
Unlawful possession—					$						
1971	53	56	31	13	2,870	14	266	4	12	..	13
1972	85	89	63	46	13,275	14	220	2	9	..	18
1973	37	39	36	31	9,780	4	69	1	2	..	1
1974	85	89	63	46	12,275	14	220	2	9	..	18
1975	189	199	136	65	28,695	29	984	42	14	2	49
Unlawful import—											
1971	74	78	60	41	11,005	16	188	3	2	..	16
1972	105	116	86	46	13,207	34	694	5	6	..	23
1973	112	115	97	58	14.258	20	220	9	10	..	18
1974	105	116	86	46	13,207	34	694	5	6	..	23
1975	134	149	106	50	8,175	36	1,039	20	7	2	34
Other offences—											
1971	15	15	10	6	3,950	4	88	..	..	..	5
1972	48	56	25	15	3,675	6	102	5	16	..	14
1973	24	26	16	11	2,850	3	48	2	5	..	5
1974	48	56	25	15	3,675	6	102	5	16	..	14
1975	52	63	38	23	6.200	11	582	4	7	..	18

(*a*) Bonds include suspended gaol sentences and/or other recognisances to be of good behaviour for a specified period.

NOTE. Where dual penalties such as a fine and a bond were imposed both are included.

Police

The primary duties of the police are to prevent crime, to detect and detain offenders, to protect life and property, to enforce the law, and to maintain peace and good order. In addition, they perform many duties in the service of the State, e.g. they act as clerks of petty sessions in small centres, as crown land bailiffs, foresters, mining wardens, and inspectors under the fisheries and various other Acts. In metropolitan and large country areas they also regulate the street traffic. With the exception of the Commonwealth Police Force and the police in the Northern Territory and the Australian Capital Territory, the police forces of Australia are under the control of the State Governments, but their members perform certain functions for the Commonwealth Government, such as acting as aliens registration officers and concurrently with Commonwealth Police and other Commonwealth Officers, policing various Commonwealth Acts and Regulations.

Women police perform special duties at places where young women and girls are subject to moral danger, control traffic at school crossings and lecture school children on road safety. They also assist male police as required in the performance of normal police duties.

The strength of the police force and the duties and ranks of the personnel involved in each State and Territory for 1974 are shown in the following table. Comparability between States is affected by differences in the classification of ranks and duties, and known differences between States are mentioned in footnotes.

Also included in the table are statistics of ancillary and civilian staff employed by police departments. Differences between States in the use of such staff are considerable. These differences arise, on the one hand, from differences in the extent to which police make use of such staff for police functions and, on the other hand, in the extent to which such staff are required to undertake additional functions (such as parking control) which are allocated to the police in varying degrees between States. There is also some overlap between duties of ancillary and civilian staff as defined in the footnotes to the table.

POLICE FORCES AND ASSISTANT STAFF, 30 JUNE 1974

Duty and rank(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
POLICE FORCES								
Criminal investigations, plain clothes police, scientific duties—								
Executive officers	4	3	1	3	3	1	..	2
Inspectors	23	37	9	7	6	6	1	2
Sergeants	384	78	156	55	97	41	13	14
Constables(*b*)	907	693	(*c*)352	268	187	90	33	34
Total, criminal investigations, etc.	1,318	811	(*c*)518	333	293	138	47	52
Traffic duties—								
Executive officers	3	4	1	2	1	1	..	..
Inspectors	6	14	4	4	7	4	..	1
Sergeants	219	26	51	23	46	8	3	16
Constables(*b*)	780	496	(*c*)129	216	204	93	14	85
Total, traffic duties	1,008	540	(*c*)(*d*)185	245	258	106	17	102
Other special and general duties—								
Executive officers	30	44	6	17	13	5	3	..
Inspectors	176	173	75	44	25	37	10	15
Sergeants	1,306	283	677	182	294	92	56	50
Constables(*b*)	3,979	3,685	(*c*)1,863	1,384	961	430	220	221
Total, other special, etc.	5,491	4,185	(*c*)2,621	1,627	(*e*)1,293	564	(*f*)289	(*f*)286
Not allocated—								
Executive officers whose duties extend beyond one branch	8	5	5	4	4	1	2	..
Inspectors	..	..	..	..	..	..	..	..
Police women	113	218	(*g*)	80	37	24	6	10
Trainees and cadets	261	122	441	432	99	106	..	74
Total, not allocated	382	345	446	516	140	131	8	84
Total police force—								
Executive officers	45	56	13	26	21	8	5	2
Inspectors	205	224	88	55	38	47	11	18
Sergeants	1,909	387	884	260	437	141	72	80
Constables(*b*)	5,666	4,874	(*c*)2,129	1,868	1,352	613	267	340
Police women	113	218	215	80	37	24	6	10
Trainees and cadets	261	122	441	432	99	106	..	74
Total police force	*8,199*	*5,881*	*3,770*	*2,721*	*1,984*	*939*	*361*	*524*

For footnotes *see* next page.

POLICE FORCES AND ASSISTANT STAFF, 30 JUNE 1974—*continued*

Duty and rank(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*
ANCILLARY AND CIVILIAN STAFF								
Employed by Police Department—								
Ancillary staff(*h*)—								
Full-time	281	142	34	212	..	1	37	..
Part-time	..	4	..	2	173	..	..	..
Civilian staff(*i*)—								
Full-time	(*j*)1,579	1,097	554	127	(*k*)317	175	41	61
Part-time	..	78	33	8	74	..	..	3
TOTAL STAFF								
Grand total—								
Full-time	**10,059**	**7,120**	**4,358**	**3,060**	**2,301**	**1,115**	**439**	**585**
Part-time	**..**	**82**	**33**	**10**	**247**	**..**	**..**	**3**

(*a*) Where more than one duty is involved, officers have been allocated to the category of duties in which the greater part of their time is spent. The allocation of executive officers and inspectors to categories of duties is necessarily somewhat arbitrary and varies from State to State. (*b*) Includes probationary constables. (*c*) Excludes probationary constables; included with trainees and cadets. (*d*) Metropolitan area only. Traffic duties outside Brisbane metropolitan area are performed by general duties police. (*e*) Includes officers engaged on motor vehicle examination and testing and licensing drivers. (*f*) Does not include transport and maintenance; each section undertakes its own transport, and maintenance is done on contract and/or by the government transport pool. (*g*) *For Queensland police women are included in the personnel figures for each rank of the respective duties.* (*h*) Parking police, native trackers, wardresses, etc.; special constables in New South Wales and Tasmania; police reservists in Victoria. (*i*) Clerks, typists, artisans, cleaners, etc., includes Commissioner and Deputy Commissioner in Tasmania. (*j*) Does not include cleaning which is done by the Cleaning Services Branch of the Government Stores Department. (*k*) Includes 79 cadets whose appointment is not subject to the Police Act.

Ancillary and civilian staff are excluded from the following table.

POLICE FORCES

30 June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970	7,324	4,739	3,221	2,282	1,529	701	235	290	20,321
1971	7,470	4,945	3,197	2,360	1,616	796	259	347	20,990
1972	7,914	5,274	3,353	2,445	1,686	879	281	398	22,230
1973	8,044	5,510	3,518	2,562	1,807	892	318	435	23,086
1974	8,199	5,881	3,770	2,721	1,984	939	361	524	24,379

Commonwealth Police Force

The Commonwealth Police Force commenced operations on 21 April 1960, and is the principal agency for the enforcement of the laws passed by the Commonwealth Parliament. It is also responsible for the protection of Commonwealth Government property and interests at various buildings and establishments under the control of the Commonwealth Government. This force co-ordinates the work of other investigation and law enforcement agencies and acts on behalf of the United Nations Organisation for the suppressing of traffic in women and the suppression of obscene literature.

Under the control of the force is the Australian Police College at Manly, New South Wales, which provides training for officers of various police forces and other agencies in Australia and New Zealand. The force has its Head Office in Canberra and District Offices in each capital city. The establishment of the force at 30 June 1974 was 1114. At that date there were, in addition, 122 civilian employees.

Prisons

Prisons

At 30th June 1974 there were 90 prisons in Australia, comprising 29 in New South Wales, 13 in Victoria, 10 in Queensland, 16 in South Australia, 18 in Western Australia, 1 in Tasmania, and 3 in the Northern Territory. There is no gaol in the Australian Capital Territory, but there are two lock-ups attached to police stations at Canberra and another lock-up at Jervis Bay, where offenders are held for short periods. Prisoners remanded or sentenced by a court in the Australian Capital Territory for more than five days are usually held in New South Wales prisons.

Convicted prisoners

CONVICTED PRISONERS

30 June—	N.S.W. (a)	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Australia	
								Number	Per 10,000 of population
1970	3,429	2,178	1,104	836	1,174	327	198	9,246	7.4
1971	3,493	2,276	1,142	854	1,261	352	166	9,544	7.5
1972	3,641	2,192	1,313	816	1,269	339	252	9,822	7.6
1973	3,399	2,096	1,414	675	1,105	332	282	9,303	7.0
1974	2,696	1.568	1,224	665	915	346	144	7,558	5.7

(a) Includes Australian Capital Territory prisoners held in New South Wales prisons.

Expenditure on law, order and public safety

Expenditure on law, order and public safety

The following table shows the identifiable expenditure on goods and services of Commonwealth Government and State public authorities whose activites are primarily directed towards serving the purposes of law, order and public safety. Because of differing legislative and administrative arrangements and differing accounting practices in the various States, the activities covered by the figures are not the same in each State; and the activities covered by the Commonwealth Government figures differ from those of the States because of the Commonwealth Government's different responsibilities in this field. The Commonwealth Government and State figures are therefore not strictly comparable; but they have been compiled by uniform methods, and each series is comparable from year to year.

ALL PUBLIC AUTHORITIES: EXPENDITURE ON LAW, ORDER AND PUBLIC SAFETY
($ million)

	1970–71	1971–72	1972–73	1973–74	1974–75
Final consumption expenditure—					
Federal Authorities	24.1	30.0	37.1	49.4	75.6
State Authorities—					
New South Wales	94.5	111.2	125.5	154.2	204.0
Victoria	53.2	62.2	72.2	88.9	122.4
Queensland	40.3	43.2	54.0	66.1	93.8
South Australia	18.8	22.7	27.4	35.2	49.8
Western Australia	22.0	28.2	31.6	38.6	56.4
Tasmania	8.6	10.5	12.7	15.1	22.7
Total States	*237.4*	*278.1*	*323.5*	*398.1*	*549.1*
Total current expenditure	*261.5*	*308.1*	*360.6*	*447.5*	*624.7*
Gross fixed capital expenditure—					
Federal Authorities	2.0	2.6	2.9	3.2	7.2
State Authorities—					
New South Wales	8.6	8.7	12.6	9.7	14.0
Victoria	3.8	5.0	5.8	8.4	8.4
Queensland	4.3	6.6	7.4	8.9	9.1
South Australia	2.4	3.1	3.2	4.2	4.1
Western Australia	3.0	1.7	2.9	3.1	5.6
Tasmania	1.8	2.3	2.8	5.0	5.2
Total States	*23.9*	*27.4*	*34.8*	*39.3*	*46.4*
Total capital expenditure	*25.9*	*30.0*	*37.7*	*42.5*	*53.6*
Total expenditure	**287.4**	**338.1**	**398.3**	**490.0**	**678.3**

Fire brigades

New South Wales

A Board of Fire Commissioners, consisting of seven members, two appointed by the State Government (President and Deputy President), two representing insurance companies and one each representing, local government authorities, volunteer firemen, and permanent fireman, is constituted under the Fire Brigades Act, 1909, and controls the public services for the prevention and extinguishing of fires. Its jurisdiction extends over the Sydney Metropolitan area and cities and towns in the rest of the State. The cost of maintenance of fire brigades is borne in proportions of one-eighth each by local councils and the Government, and three-quarters by insurance companies.

At 31 December 1975 the actual strength of the Fire Brigade throughout the 174 fire districts of New South Wales was 479 officers and 1,357 permanent and 2,765 volunteer firemen. Corresponding figures for the Sydney Fire District were 401, 1,229 and 179. The revenue for the year 1975 was $31,191,000, as follows: from the Government, $3,720,000; municipalities and shires, $3,721,000; fire insurance companies and firms, $22,277,000; and from other sources, $1,473,000. The disbursements for the year were $30,798,000. The Board of Fire Commissioners formerly provided fire protection services for Canberra, in the Australian Capital Territory, and the cost of these services was reimbursed by the Commonwealth Government. From January 1976 these activities are carried out by the A.C.T. Fire Brigade.

Under the Bush Fires Act, 1949 a Bush Fire Fighting Fund exists from which finance is provided by the Government, insurance companies, and certain local government councils for the prevention, detection, control and suppression of bush fires in the Eastern and Central Divisions of the State. At 30 June 1975 Volunteer Brigades equipped by means of this fund numbered about 2,500 with an active membership of approximately 60,000 persons. Expenditure from the Fund for the purchase of fire fighting units, plant running expenses, and maintenance and repairs for the year ended 30 June 1975 was $1,935,000.

Victoria

In Victoria, fire brigades are controlled by the Metropolitan Fire Brigades Board consisting of eight members, including an employees' representative, and the Country Fire Authority consisting of twelve members.

Metropolitan Fire Brigades Board. The Metropolitan Fire Brigades Board receives contributions from the municipalities, the insurance companies and the State Government in the proportion of one-eighth, three-quarters and one-eighth respectively. At 30 June 1975 the Board had under its control 47 stations, 1,396 permanent staff, and 283 special service and clerical, etc., staff. The total receipts for 1974-75 were $21,627,214, comprising contributions $19,196,210, receipts for services $1,622,905, and interest and sundries $808,099. The expenditure was $21,298,961.

Country Fire Authority. This authority is responsible for the prevention and suppression of fires in the 'country area of Victoria', which embraces the whole of the State outside the Metropolitan Fire District, excluding State forests, National Parks and certain Crown lands. The country area has been divided into twenty-five fire control regions, three of which (Ballarat, Bendigo and Geelong) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority receives contibutions in the proportion of two-thirds from insurance companies and one-third from the Treasury. At 30 June 1975 the Country Fire Authority Act applied to 155 insurance companies and 215 urban and 1,062 rural fire brigades. Permanent staff of the Authority totalled 398 (including administrative), while the effective strength of volunteer personnel was 118,283. Income for the year 1974–75 amounted to $8,975,495. Total expenditure other than loan redemption and capital expenditure amounted to $8,809,333.

Queensland

There are two controlling bodies responsible for fire fighting services throughout Queensland. The State Fire Services Council controls brigades set up under *The Fire Brigades Act*, 1964 *to* 1973, and the Rural Fires Board under provisions of *The Rural Fires Act*, 1946 *to* 1975 administers bush fire brigades. In addition a local authority may establish a fire fighting brigade of its own as do some major establishments such as the State Forestry Department and private companies whose activities involve fire hazards.

Fire districts are constituted under *The Fire Brigades Act*, 1964 *to* 1973. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is borne by the State Government, the component local authorities and the contributory insurance companies and owners of property (which is insured with a company other than a contributory company) in the proportions of one-eighth each by the State Government and the component local authorities, and three-quarters by the contributory companies and owners of property referred to.

At 30 June 1975 there were 81 fire brigade boards. The number of stations was 194 and the brigade strength was 1,422 permanent staff and 1,314 auxiliary and 32 volunteer staff. The total revenue for the year 1974–75 was $18,171,794 received mainly from the following sources: Government $2,193,102 local authorities $2,174,550, insurance companies $13,202,660. Loan receipts (Government and other) were $1,457,708. The total expenditure for the year was $17,989,874, which included administration and working expenses, etc., $16,644,135, interest and redemption $901,682 and other expenditure $444,057.

The Rural Fires Board, operating under the *Rural Fires Act* 1946 *to* 1975, consists of a chairman and nine members all of whom are appointed by the Governor-in-Council. Eight of the members are from Government Departments, the other represents the United Graziers Association. For administrative purposes the State is divided into Rural Fire Districts under the control of a Chief Fire Warden, and in these districts fire wardens are appointed to assigned areas. These officers control the issuing of permits, reporting of fire hazards and education in fire protection, while the bush fire brigades operate on a voluntary basis under the control of an appointed first officer. At 30 June 1975 there were 1,250 bush fire brigades. Expenditure by the State Government including contributions by bush fire brigades for equipment during 1974–75 amounted to $296,761.

South Australia

The *Fire Brigades Act*, 1936 provides for a board of five members, that the expenses and maintenance of brigades are defrayed in the proportion of one-eighth by the Treasury, three-quarters by insurance companies and one-eighth by the municipalities concerned. At 30 June 1975 there were altogether 39 fire brigades stations, of which 17 were metropolitan and 22 country.

The strength of the permanent staff at 30 June 1975 was 695, comprising 501 officers and men, 119 country auxiliary firemen and 75 other employees (including maintenance workers). The total revenue for the year 1974–75 was $6,050,000, made up as follows: insurance companies $4,537,500, Treasury $756,250 and municipalities and district councils $756,250.

Western Australia

The *Fire Brigades Act* 1942–1972 provides for the constitution of fire districts which are under the control of the Western Australian Fire Brigades Board. There were 74 fire districts at 30 June 1975. The contribution to the Board is made in the proportion of 12½ per cent from the State Government, 12½ per cent from local government authorities, and 75 per cent from insurance companies. The number of local governments authorities and insurance companies who contributed numbered 90 and 155 respectively. Sixteen permanent and two volunteer brigades operate in the metropolitan fire district centred in the City of Perth. Permanent brigade personnel served with volunteer brigade personnel in five large country centres and volunteer brigades provide town fire protection at some 75 other centres. At 30 June 1975 the Board had 725 employees and there were 1,874 volunteer brigade officers and firemen. The revenue for the year ended 30 June 1975 was $10,656,276 and the expenditure $10,079,514.

Under the *Bush Fires Act*, 1954–1973 a Bush Fires Board, consisting of thirteen members, six of whom are nominated by the Country Shire Councils' Association, was set up to advise the Minister for Lands on bush fire control and to administer the Bush Fires Act. The Act also provides for the registration of bush fire control officers, who numbered 2,601 at 30 June 1975, and the establishment of bush fire brigades, 962 at 30 June 1975. Many individual brigades are large organisations with numerous self-contained sections.

Tasmania

The *Fire Brigades Act* 1945 provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigade boards, while leaving the responsibility for individual control and management with the boards. The Commission comprises the following: two persons nominated by the Minister; one person representing the City and Municipal Councils; one person nominated by the Chairman of the Rural Fires Board; three persons representing the insurance companies; and one employees' representative. Contributions towards the cost of operations are on the basis of 22.5 per cent each from the Treasury and the municipalities and 55 per cent from the insurance companies concerned. The distribution made by the Commission to fire brigade boards during 1974–75 was $3,402,000. There were, at 30 June 1974, 23 boards controlling 40 stations and their aggregate staffs numbered 720 (officers and firemen), comprising 255 permanent personnel, 425 part-time firemen and 40 volunteers. The volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.

Following the fire disaster of February 1967, amendments were made to the *Rural Fires Act* 1950. The 1967 Act brought the separate urban and rural fire services and the State Civil Defence and Emergency Services together under the Chief Secretary. The newly constituted Rural Fires Board, under a chairman appointed by the Governor, consists of 16 members. At 30 June 1975 the Board had a paid staff of 30, headed by the State Fire Control Officer and included six regional fire control officers and assistants. At 30 June 1975 there were 305 rural fire brigades composed of 7850 registered volunteers. The Board's budget in 1973–74 was $936,000. Half the administrative expenditure is met by insurance companies insuring rural properties, and half by the Government. Grants to councils and workers' compensation and expenditure is borne by the Government, with remaining expenditure being shared proportionately between the Government and municipalities.

Northern Territory

Under the Fire Brigade Ordinance fire brigades in the Northern Territory are under the control of the Administrator in Council. Regular fire stations are maintained for the urban areas of Darwin, Casuarina, Winnellie, Katherine, Tennant Creek and Alice Springs. There are volunteer stations at Batchelor, Adelaide River, Pine Creek, Mataranka and Larrimah. At 30 June 1975 the personnel strength of the regular stations was 114 full-time regulars, 18 part-time auxiliaries and 20 part-time volunteers. Regular stations received 2051 calls of all types during 1975.

Under the Bush Fire Control Ordinance 1965 the regulation of fire-fighting in non-urban areas is the responsibility of a Bush Fire Council which has six regional fire control committees and receives executive assistance from the Forestry Section of the Department of Northern Australia. The Forestry Section also provides some equipment and actual fire-fighting assistance to rural land holders. The Bush Fire Council consists of private and government members and works closely together with the fire brigades.

Australian Capital Territory

The A.C.T. Fire Brigade is administered by the Department of the Capital Territory.

At 31 December 1975 the 4 fire stations in Canberra employed a permanent fire fighting staff of 115. Expenditure during 1974–75 amounted to $1,577,108, of which $557,507 was a charge against the Canberra Municipal Account.

The responsibility for prevention and suppression of fires which occur outside the built-up areas of the A.C.T. and Jervis Bay rests with the A.C.T. Bush Fire Council. In 1974–75, expenditure by the council amounted to $166,956.

Patents, trade marks and designs

Patents

Patents for inventions are granted under the *Patents Act* 1952, which applies to Australia and to the Territory of Norfolk Island. Regulations under the Act provide variable fees for lodgment of applications depending on size of specifications and number of claims. The basic fee for lodging an application and complete specification is $30. Examination is no longer made automatically following lodgment of an application. The Commissioner may direct an applicant to request examination in which case the examination fee is $90, or the applicant may request examination of his own accord, in which case the fee is $120. If examination is not requested within six months after the commissioner's direction or within five years after lodgment of a complete specification, the application lapses.

Continuation fees in respect of patent applications are payable commencing with a fee of $12 on the expiration of the second year from the date of lodgment of the complete specification and rising to $100 on the expiration of the fifteenth year from that date. Renewal fees in respect of patents are payable commencing with a fee of $20 on the expiration of the fourth year from the date of the patent and rising to $100 on the expiration of the fifteenth year from that date. Continuation fees cease to be payable when a patent has been sealed in respect of an application and renewal fees do not become payable until that time.

PATENTS: AUSTRALIA

	1971	*1972*	*1973*	*1974*	*1975*
Applications. . . .	16,407	16,165	16,460	15,950	14,082
Applications accompanied by provisional specifications .	3,933	4,195	4,354	4,036	4,250
Letters patent sealed . .	10,641	10,920	11,670	12,828	12,161

Trade marks and designs

Under the *Trade Marks Act* 1955 the Commissioner of Patents is also Registrar of Trade Marks. Provision is made for the registration of users of trade marks and for their assignment with or without the goodwill of the business concerned. Under the *Designs Act* 1906 the Commissioner of Patents is also Registrar of Designs.

TRADE MARKS AND DESIGNS: AUSTRALIA

	1971	*1972*	*1973*	*1974*	*1975*
Trade marks—					
Received	8,866	9,204	10,026	9,209	9,046
Registered	5,710	5,012	5,665	5,303	7,087
Designs—					
Received	1,977	2,228	2,115	1,991	2,105
Registered	1,578	1,608	1,732	1,570	1,733

Copyright

Copyright is regulated by the Commonwealth *Copyright Act* 1968, which came into force on 1 May 1969. On that date Australia ratified its adherence to the Brussels revision of the Berne Copyright Convention and to the Universal Copyright Convention, whereby citizens of member countries are accorded protection by complying with the convention formality requiring proprietors to place on their works the symbol © together with their name and the year of first publication, in such a manner and location as to give reasonable notice of their claim of copyright in the works so identified. The new legislation contains no provision for the registration of copyright, and the Copyright Office ceased to exist on 1 May 1969. Copyright is now administered by the Attorney-General's Department.

CHAPTER 16

NATIONAL ACCOUNTS

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy.

Estimates of national income and expenditure have been compiled by the Bureau since 1944–45 and have been published annually as papers entitled *National Income and Expenditure* accompanying the Commonwealth Budgets. Detailed annual estimates of national income and expenditure on a revised basis were published in *Australian National Accounts, National Income and Expenditure*, 1974–75 (7.1). Preliminary estimates (less detailed) for 1974–75 were published earlier in a Budget Paper. Quarterly estimates are published in *Quarterly Estimates of National Income and Expenditure* (7.5). A supplement to the December quarter 1975 issue of *Quarterly Estimates of National Income and Expenditure* (7.10) presented historical quarterly series of gross domestic product and related aggregates at current and constant prices consistent with the 1974–75 Australian National Accounts bulletin.

Australian National Accounts, Gross Product by Industry at Current and Constant Prices, 1962–63 *to* 1973–74 was published in November 1975. The Bureau also compiles input-output tables for the Australian economy. Preliminary tables for the year 1968–69 were published in *Australian National Accounts, Input-Output Tables (Preliminary)* 1968–69 (7.9) and the final results will be published in *Australian National Accounts, Input-Output Tables* 1968–69 (7.11). to be issued in 1977.

The figures shown on pages 498–503 are as published in *Australian National Accounts, National Income and Expenditure*, 1974–75.

NATIONAL INCOME AND EXPENDITURE

Description of National Income and Expenditure Accounts

A brief description of the conceptual basis of national accounts is given in this section, but for a more detailed treatment of the concepts and structure of the Australian National Accounts reference should be made to *Australian National Accounts, National Income and Expenditure*, 1974–75.

Definition and relationship of the concepts of product, income and expenditure

The main concepts of product, income and expenditure in the Australian National Accounts are defined and expressed in equivalents as follows.

Gross domestic product is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. Thus gross domestic product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. *Gross farm product* is that part of gross domestic product which derives from production in rural industries. *Gross non-farm product* arises from production in all other industries.

Gross domestic product at factor cost is that part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour, land, capital, and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less indirect taxes plus subsidies.

Domestic factor incomes is that part of the value added within a given period by factors of production (labour, land, capital and enterprise) which accrues as income to their suppliers after allowing for the depreciation of fixed capital. It is equivalent to gross domestic product at factor cost less depreciation allowances.

National income is the net income accruing within a given period to Australian residents from their services in supplying factors of production (labour, land, capital and enterprise) in Australia or overseas plus indirect taxes less subsidies. It is equivalent to domestic factor incomes plus indirect taxes less subsidies and net income paid overseas.

National disposable income is the net income accruing within a given period to Australian residents from their services in supplying factors of production, from net indirect taxes and from re-distributive transfers. It is equivalent to national income less net transfers overseas.

Gross national expenditure is the total expenditure within a given period on final goods and services (i.e. excluding goods and services used up during the period in the process of production) bought by Australian residents. It is equivalent to the gross domestic product plus imports of goods and services less exports of goods and services.

Household income is the total income whether in cash or kind, received by persons normally resident in Australia in return for productive activity (such as wages, salaries and supplements, incomes of unincorporated enterprises, etc.) and transfer incomes (such as cash social service benefits, interest, etc.). It includes the imputed interest of life offices and superannuation funds, which is the benefit accruing to policy holders and members from investment income of the funds. It also includes third party motor vehicle and public risk insurance claims paid to persons in respect of policies taken out by enterprises. However, it excludes any income which might be said to accrue to persons in the form of undistributed company income. It also includes any property income received by non-profit organisations such as private schools, churches, charitable organisations, etc.

Framework of accounts and sectors

In the accounts shown in this Year Book four internal institutional sectors are distinguished—corporate trading enterprises (including public trading enterprises), financial enterprises (including the nominal industry), households (including their unincorporated enterprises) and general government. All of these internal sectors engage in production activity, receive and disburse income and accumulate assets. Without distinguishing between internal sectors, their transactions are summarised in three accounts, a domestic production account (Table 1), a national income and outlay account (Table 3) and a national capital account (Table 4). In addition there is an overseas sector having an account (Table 6) which shows a summary of the transactions into which overseas governments, persons and businesses enter with Australian residents. These four accounts form a system which though not detailed is complete in that, in principle, a credit in any account is matched by a debit in some other account. Income and outlay accounts are shown also for each of the four domestic sectors. The national income and outlay account is a consolidation of the income and outlay accounts of the four domestic sectors. The sector income and outlay accounts can together take the place of the national income and outlay account to provide a more detailed system.

The framework of sectors and accounts underlying the form of social accounts shown in this publication is set out in the following diagram. The heavy rectangles depict the minimum system of

ARTICULATION OF AUSTRALIAN NATIONAL ACCOUNTS

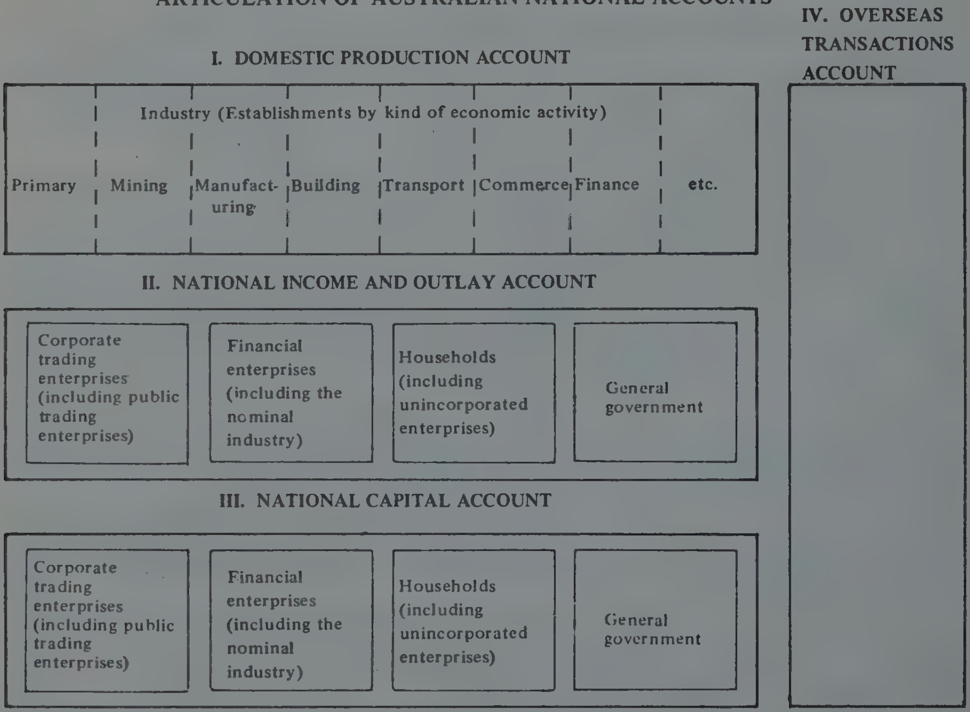

IV. OVERSEAS TRANSACTIONS ACCOUNT
I. DOMESTIC PRODUCTION ACCOUNT
Industry (Establishments by kind of economic activity)
Primary
Mining
Manufacturing
Building
Transport
Commerce
Finance
etc.
II. NATIONAL INCOME AND OUTLAY ACCOUNT
Corporate trading enterprises (including public trading enterprises)
Financial enterprises (including the nominal industry)
Households (including unincorporated enterprises)
General government
III. NATIONAL CAPITAL ACCOUNT
Corporate trading enterprises (including public trading enterprises)
Financial enterprises (including the nominal industry)
Households (including unincorporated enterprises)
General government

PLATE 39

four accounts which represent the consolidated accounts of the nation. The light rectangles represent the accounts for institutional sectors. The sector income and outlay accounts are shown in this Year Book. The sector capital accounts are published in *Australian National Accounts, National Income and Expenditure*, 1974–75 (Reference 7.1). The sub-division of the domestic production account represents production accounts for establishments classified according to industry. Selected transactions from such production accounts are shown in Reference 7.1 mentioned above, and such production accounts can be developed in detail to produce input-output accounts.

Description of the accounts

The *domestic production account* is a consolidation of the production accounts of all producers regardless of sector. The production account is shown as receiving revenue from the sale of goods and services to final buyers; all intermediate goods and services are cancelled out, since they represent a cost to one producer to offset the revenue of the other. On the payments side are shown the payments of indirect taxes less subsidies, and, since the account is presented from the point of view of the producing unit, the wages and salaries paid to employees. The balance is the gross operating surplus which may be divided into depreciation allowances and net operating surplus. Depreciation allowances is carried to the national capital account (or the sector capital accounts) and net operating surplus, together with wages and salaries and indirect taxes less subsidies, is carried to the national income and outlay account (or sector income and outlay accounts). In input-output tables, the domestic production account is broken up into accounts for separate industries, and transactions associated with intermediate usage of goods and services are shown in the production accounts for the separate industries.

The *national income and outlay account* is shown as receiving wages, salaries and supplements, net operating surplus and indirect taxes less subsidies from the domestic production account. From this income are deducted net payments of income and miscellaneous transfers to overseas, and the remainder is the national disposable income. The outlay side of the account shows this disposable income is largely used for final consumption expenditure and the balance is the nation's saving. The national income and outlay account is a consolidation of the sector income and outlay accounts.

The *national capital account* is a consolidation of the sector capital accounts. It shows on the receipts side depreciation allowances transferred from the domestic production account and saving transferred from the national income and outlay account (or from the sector income and outlay accounts). On the payments side are shown purchases by all sectors of new buildings and capital equipment, the increase in stocks of all sectors and a balance described as net lending to overseas. This concept of net lending to overseas includes increases (and, negatively, decreases) in Australia's overseas monetary reserves. The net lending to overseas is also the balance on current transactions in the overseas transactions account.

The *overseas transactions account* records all transactions of a current nature between Australian and overseas residents. Although this is an account for the overseas sector, the items are named from the Australian viewpoint. The account shows that Australia's current receipts from overseas consist of the value of (Australia's) exports of goods and services, property income received from overseas and transfers from overseas. These receipts are used for (Australia's) imports of goods and services and payments of property income and transfers to overseas; and the balance of current receipts represents net lending to overseas. Positive net lending to overseas corresponds to a surplus on current transactions with overseas and negative net lending corresponds to a deficit. The transactions in property income shown in this account differ from estimates shown in balance of payments statistics because in the national accounts undistributed company income is not imputed to the beneficial owners. For this reason, also, net lending to overseas differs from the balance on current account shown in balance of payments statistics.

The *corporate trading enterprises (including public trading enterprises) income and outlay account* is shown as receiving the net operating surpluses of trading enterprise companies and public trading enterprises from the domestic production account and property income (interest, etc. and dividends) from other sectors. This total of receipts is appropriated to various transfer payments (interest, etc. paid, income tax payable, dividends paid, and public enterprise income) and undistributed income which is the saving of the sector. Public trading enterprises are not shown to have any saving. Public enterprise income is here measured by the net operating surplus and the whole amount is transferred to the general government income and outlay account. Also, as property income received and paid by public trading enterprises have not been distinguished from property income received and paid by general government, the interest and dividends shown in this account are only those received and paid by companies.

The *financial enterprises (including the nominal industry) income and outlay account* is shown receiving net operating surplus from the domestic production account and property income from other sectors. This total of receipts is appropriated to various transfer payments (interest, etc., income tax and dividends) and the saving of the sector consisting of retained income of public financial enterprises and undistributed income of companies. The disbursements shown for the sector include interest on life and superannuation funds imputed to households. This represents earnings accumulated for policy holders and members and is shown as paid to the household income and outlay account where it contributes to household saving.

The *households* (*including unincorporated enterprises*) *income and outlay account* is shown receiving net operating surplus from the domestic production account in respect of unincorporated enterprises and dwellings owned by persons. In order to show the net income from these activities, related interest payments (which could be shown on the disbursements side) are here shown as a deduction from net operating surplus. Wages, salaries and supplements is also received from the domestic production account. In addition to these primary incomes, transfer incomes are received from other sectors (interest, etc., dividends, cash benefits from general government and transfers from overseas). On the disbursements side are shown payments for goods and services for final consumption and transfer payments (consumer debt interest, taxes and transfers overseas). The balance is the saving of the sector which is transferred to the sector capital account.

Household income includes interest on life and superannuation funds but not pensions received from superannuation funds nor claims on life insurance policies. These are treated as capital transactions involving only the exchange of one asset (equity in life insurance and superannuation funds) for another (cash). However, age and invalid pensions paid by general government are included in household income.

Estate and gift duties are treated as current receipts by general government and also as current payments by persons even though the individual payers may regard them as of a capital nature. All personal gifts and transfers to or from overseas are also treated as current. Personal transfers to and from overseas include such items as legacies and migrants' funds, which the persons concerned may think of as of a capital nature.

Net current expenditure on goods and services by non-profit organisations serving persons is included in private final consumption expenditure. Expenditure on buildings (e.g. churches, private schools, clubs) is treated as capital expenditure and excluded from this account.

The *general government income and outlay account* reflects a distinction between current and capital expenditure, which is necessarily arbitrary in some measure and has been made on the basis of excluding from current outlay expenditure on public works and increase in stocks. Expenditure on public works is taken to include new buildings, construction, plant and machinery and any replacement of assets charged to loan funds or capital works votes. Current outlay excludes all expenditure on roads, because a satisfactory distinction between new works and maintenance cannot be made. All defence expenditure is included in current outlay.

The income from public enterprises shown in this account consists of the income actually transferred to general government by public financial enterprises, and the whole of the income of public trading enterprises as measured by their net operating surplus. The net operating surplus of public trading enterprises is derived by deducting from their gross operating surplus any depreciation shown by these enterprises in their published accounts, except in the case of enterprises which are at present analysed on the basis of cash accounts in which depreciation is not allowed (usually enterprises whose accounts are included in Commonwealth or State public accounts). As in the case of households, all overseas gifts are included in the income and outlay account. These include gifts for international relief, technical assistance, etc., grants, contributions to international organisations and expenditure in connection with the administration of Papua New Guinea.

Estimates at constant prices

For certain kinds of intertemporal comparison, it is desirable to derive measures which attempt to remove the direct effect of price changes during the periods under review. Such estimates, conventionally described as 'at constant prices', are presented in Tables 2 and 5 for gross domestic product, exports and imports of goods and services, and gross national expenditure and its principal components.

In concept, constant price estimates may be thought of as being derived by expressing the value of every component commodity as the product of a price and a quantity, and by substituting for each actual current price the corresponding price in the chosen base year. Aggregates at constant prices for each year are then obtained by summation. In practice, the quality and quantity of the available data are such that a number of other methods are used in the preparation of estimates at constant prices. These estimates involve approximations and assumptions, and this should be borne in mind in the interpretation and use of the results.

Gross domestic product is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. This relationship has been used in deriving the estimates of gross domestic product at constant prices shown in Table 2. Their sub-division into gross farm product and gross non-farm product has been estimated by deriving gross farm product by the production method (revaluing farm output and farm usage of intermediate goods and services to obtain gross farm product as the difference) and deducting this from total gross domestic product to obtain gross non-farm product.

For a considerable part of private final consumption expenditure and exports and imports of goods and services, it is possible to identify specific units of quantity and price, and revalue the quantities at base year prices. Where it is not possible to express the values in successive years as the product of prices and homogeneous units of quantity, the treatment generally adopted is to divide values by appropriate price indexes.

With the remaining components of gross national expenditure, a greater degree of approximation and assumption is involved. For example, when information about the commodity content of a flow is limited (e.g. various components of gross fixed capital expenditure), special purpose price indexes relating to selected commodities are applied to the expenditure on the full range of commodities they represent. In other cases, for instance, where the expenditure relates to 'unique' goods (e.g. goods not homogeneous from year to year), revaluation is achieved by use of an index reflecting the price change of the direct materials and direct labour components of the unique goods in question. This method of revaluation is also applied to government final consumption expenditure. The resulting estimates have, therefore, considerable limitations for many uses, for example in studies of productivity.

The method used to estimate the increase in stocks involves first reducing the increase in book values of stocks by an estimate of the stock valuation adjustment to obtain the measures at current prices, and then revaluing the latter to arrive at the estimates at constant prices. The stock valuation adjustment has to be made because existing stocks are sometimes explicitly revalued (for example, such revaluations are sometimes made by business enterprises so as to show stocks at the lower of cost or market value for balance sheet purposes) or more commonly, because stocks used or disposed of are replaced by new stocks of the same goods but at different prices.

Part 1 of *Australian National Accounts, National Income and Expenditure*, 1974–75 contains a fuller discussion of the conceptual problems involved in making these estimates and Appendix B of that publication contains a brief account of the sources and methods used in preparing the estimates.

Reliability and revisions

Estimates of national income and expenditure are necessarily prepared from a very wide range of statistical information, some of which is available quickly, some of it only with a delay of several years after the period to which it relates. Some of it is closely related to the desired national income concepts, but some of it is not completely satisfactory in various respects, including coverage, concepts and timing. Estimates, in particular for the most recent years, are therefore subject to revision.

This applies particularly to estimates based on income tax statistics—income of companies, non-farm unincorporated enterprises, depreciation, and part of gross private fixed investment—which are subject to substantial revisions for the last two years, as tabulations of income tax statistics do not become available until about twenty-two months after the end of each financial year.

It is not possible to put precise limits on the degree of revision likely to any particular series, nor to state degrees of reliability in a statistical sense. These depend in large part on the range and quality of the basic statistical data. For illustrations of common causes of revisions reference should be made to *Australian National Accounts, National Income and Expenditure*, 1974–75.

National income and expenditure tables

(For explanatory note on item numbers *see* Note following Table 3.)

TABLE 1
DOMESTIC PRODUCTION ACCOUNT
($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Final consumption expenditure—					
1	Private	19,991	22,189	24,836	29,072	34,541
2	Government	4,198	4,760	5,441	6,756	9,092
	Gross fixed capital expenditure—					
3	Private	5,851	6,311	6,586	7,956	8,788
4	Public enterprises	1,550	1,774	1,777	2,013	2,654
5	General government	1,377	1,520	1,692	1,951	2,710
6	Increase in stocks	327	−113	−340	1,602	836
7	Statistical discrepancy	−318	−151	216	1,195	547
	Gross national expenditure	*32,976*	*36,290*	*40,208*	*50,545*	*59,168*
8	Exports of goods and services	5,070	5,633	6,949	7,774	9,782
9	*Less* Imports of goods and services	5,118	5,194	5,327	7,650	9,947
	Expenditure on gross domestic product	**32,928**	**36,729**	**41,830**	**50,669**	**59,003**
10	Wages, salaries and supplements	17,936	20,068	22,417	27,518	35,190
	Gross operating surplus—					
	Trading enterprises—					
11*a*	Companies	4,719	5,098	5,984	6,690	6,201
11*b*	Unincorporated enterprises	4,223	4,731	5,796	7,499	7,005
11*c*	Dwellings owned by persons	1,828	2,100	2,410	2,847	3,478
11*d*	Public enterprises	1,077	1,218	1,270	1,244	1,146
11*e*	Financial enterprises	591	676	792	852	937
11*f*	*Less* Imputed bank service charge	744	853	1,068	1,331	1,625
	Gross domestic product at factor cost	*29,630*	*33,038*	*37,601*	*45,319*	*52,332*
12	Indirect taxes less subsidies	3,298	3,691	4,229	5,350	6,671
	Gross domestic product	**32,928**	**36,729**	**41,830**	**50,669**	**59,003**
	Gross farm product	2,004	2,237	3,052	4,478	3,623
	Gross non-farm product	30,924	34,492	38,778	46,191	55,380

TABLE 2
EXPENDITURE ON GROSS DOMESTIC PRODUCT AT AVERAGE 1966–67 PRICES
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Final consumption expenditure—					
Private	17,140	17,911	18,997	20,008	20,348
Government	3,229	3,272	3,439	3,668	3,886
Gross fixed capital expenditure—					
Private	4,983	5,020	4,964	5,353	4,842
Public	2,455	2,600	2,534	2,571	2,823
Increase in stocks	313	−95	−184	1,004	562
Statistical discrepancy	−259	−110	172	815	321
Gross national expenditure	*27,861*	*28,598*	*29,922*	*33,419*	*32,782*
Exports of goods and services	5,165	5,501	5,715	5,501	5,845
Less Imports of goods and services	4,866	4,715	4,906	6,438	6,462
Expenditure on gross domestic product	**28,160**	**29,384**	**30,731**	**32,482**	**32,165**
Gross farm product	2,528	2,748	2,459	2,544	2,738
Gross non-farm product	25,632	26,636	28,272	29,938	29,427

TABLE 3

NATIONAL INCOME AND OUTLAY ACCOUNT

($ million)

		1970–71	1971–72	1972–73	1973–74	1974–75
10	Wages, salaries and supplements	17,936	20,068	22,417	27,518	35,190
11g	Net operating surplus	8,876	9,888	11,892	14,213	13,151
	Domestic factor incomes	*26,812*	*29,956*	*34,309*	*41,731*	*48,341*
13	*Less* Net income paid overseas	393	387	408	311	457
12a	Indirect taxes	3,587	4,079	4,552	5,629	6,999
12b	*Less* Subsidies	289	388	323	279	328
	National income	*29,717*	*33,260*	*38,130*	*46,770*	*54,555*
14	*Less* Net transfers to overseas	138	152	231	319	265
	National disposable income	**29,579**	**33,108**	**37,899**	**46,451**	**54,290**
	Final consumption expenditure—					
1	Private	19,991	22,189	24,836	29,072	34,541
2	Government	4,198	4,760	5,441	6,756	9,092
15 to 20	Saving	5,390	6,159	7,622	10,623	10,657
	Disposal of income	**29,579**	**33,108**	**37,899**	**46,451**	**54,290**

NOTE. Items in all current price tables are numbered from 1 to 26, with or without the addition of a letter, and this system is used to identify the corresponding credit and debit entries in the accounts and as a key to the notes on pages 504–8. In some cases the items correspond exactly, while in other cases an entry in one table is the sum of two or more entries in other tables; here the total is given a number, and the components have a number and a letter. In the remaining type of case all entries are given the same number and a distinguishing letter, because in this group one item is not the sum of one or more entries. The relationship between these items can still be traced through because the sum of all credit entries must equal the sum of all debit entries.

TABLE 4

NATIONAL CAPITAL ACCOUNT

($ million)

		1970–71	1971–72	1972–73	1973–74	1974–75
11h	Depreciation allowances	2,818	3,082	3,292	3,588	3,991
	Saving—					
15	Increase in income tax provisions	27	142	491	990	−452
16	Undistributed (company) income	838	849	1,028	961	−179
17	Retained income of public financial enterprises	108	112	174	181	209
18	Household saving	2,213	2,593	3,789	5,413	7,728
19	General government surplus on current transactions	2,153	2,408	2,065	2,991	3,000
20	General government grants for private capital purposes	51	55	75	87	133
26	Extraordinary insurance claims paid	..	..	..	..	218
	Finance of gross accumulation	**8,208**	**9,241**	**10,914**	**14,211**	**14,648**
	Gross fixed capital expenditure—					
	Private—					
3a	Dwellings	1,549	1,785	2,122	2,583	2,501
3b	Other building and construction	1,392	1,451	1,364	1,592	1,978
3c	All other	2,910	3,075	3,100	3,781	4,309
4	Public enterprises	1,550	1,774	1,777	2,013	2,654
5	General government	1,377	1,520	1,692	1,951	2,710
	Total gross fixed capital expenditure	*8,778*	*9,605*	*10,055*	*11,920*	*14,152*
	Increase in stocks—					
6a	Farm and miscellaneous	−46	−142	−264	776	359
6b	Private non-farm	373	29	−76	826	477
7	Statistical discrepancy	−318	−151	216	1,195	547
21	Net lending to overseas	−579	−100	983	−506	−887
	Gross accumulation	**8,208**	**9,241**	**10,914**	**14,211**	**14,648**

TABLE 5

GROSS FIXED CAPITAL EXPENDITURE AND INCREASE IN STOCKS AT AVERAGE 1966-67 PRICES

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Gross fixed capital expenditure—					
Private—					
Dwellings	1,342	1,438	1,577	1,598	1,257
Other building and construction	1,162	1,128	993	1,010	995
All other	2,479	2,454	2,394	2,746	2,590
Total private	*4,983*	*5,020*	*4,964*	*5,353*	*4,842*
Public	2,455	2,600	2,534	2,571	2,823
Total	**7,438**	**7,620**	**7,498**	**7,924**	**7,665**
Increase in stocks—					
Farm and miscellaneous	−20	−122	−123	415	245
Private non-farm	333	27	−61	589	317
Total	**313**	**−95**	**−184**	**1,004**	**562**

TABLE 6

OVERSEAS TRANSACTIONS ACCOUNT

($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
9*a*	Imports f.o.b.	3,790	3,792	3,808	5,753	7,658
9*b*	Transportation	832	804	841	1,169	1,465
9*c*	Travel	199	264	321	341	388
9*d*	Government transactions	127	124	122	116	150
9*e*	Other goods and services	170	210	235	271	286
9	*Imports of goods and services*	*5,118*	*5,194*	*5,327*	*7,650*	*9,947*
13*a*	Property income to overseas	544	593	704	719	827
14*a*	Personal transfers overseas	134	172	217	253	235
14*b*	General government transfers overseas	185	206	252	289	350
21	Net lending to overseas	−579	−100	983	−506	−887
	Use of current receipts	**5,402**	**6,065**	**7,483**	**8,405**	**10,472**
8*a*	Exports f.o.b.	4,230	4,741	6,015	6,694	8,463
8*b*	Transportation	474	498	571	680	827
8*c*	Travel	135	131	123	162	210
8*d*	Government transactions	82	90	90	93	107
8*e*	Other goods and services	149	173	150	145	175
8	*Exports of goods and services*	*5,070*	*5,633*	*6,949*	*7,774*	*9,782*
13*b*	Property income from overseas	151	206	296	408	370
	Transfers from overseas—					
14*c*	Personal	181	226	238	223	245
14*d*	Extraordinary insurance claims	..	..	..	..	75
	Current receipts from overseas	**5,402**	**6,065**	**7,483**	**8,405**	**10,472**

TABLE 7

CORPORATE TRADING ENTERPRISES (INCLUDING PUBLIC TRADING ENTERPRISES) INCOME AND OUTLAY ACCOUNT

($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Net operating surplus—					
11*i*	Trading enterprise companies	3,416	3,623	4,429	4,980	4,218
11*j*	Public trading enterprises	630	729	737	665	555
13*c*	Interest, etc. received	216	235	267	399	496
13*d*	Dividends received	72	82	101	144	133
	Receipts	**4,334**	**4,669**	**5,534**	**6,188**	**5,402**
13*e*	Interest etc. paid	803	900	1,038	1,251	1,683
25*a*	Third party insurance transfers to persons	39	44	50	66	83
22*a*	Public enterprise income	630	729	737	665	555
	Company income—					
15*a*	Income tax payable	1,367	1,448	1,885	2,408	n.a.
13*f*	Dividends paid	834	885	980	1,011	n.a.
16*a*	Undistributed income	661	663	844	787	n.a.
		2,862	*2,996*	*3,709*	*4,206*	*3,081*
	Disbursements	**4,334**	**4,669**	**5,534**	**6,188**	**5,402**

TABLE 8

FINANCIAL ENTERPRISES (INCLUDING THE NOMINAL INDUSTRY) INCOME AND OUTLAY ACCOUNT

($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
11*k*	Net Operating Surplus	494	571	676	713	775
11*f*	*Less* imputed bank service charge	744	853	1,068	1,331	1,625
13*g*	Interest etc. received	2,086	2,407	2,889	3,791	4,820
13*h*	Dividends received	106	117	130	145	148
14*d*	Extraordinary insurance claims from overseas	. .	. .	. .	. .	75
	Receipts	**1,942**	**2,242**	**2,627**	**3,318**	**4,193**
13*i*	Interest on life and superannuation funds imputed to households	531	604	689	755	877
13*j*	Other interest etc. paid	853	1,017	1,218	1,811	2,417
15*b*	Income tax on life and superannuation funds	19	21	25	53	62
26	Extraordinary insurance claims paid	. .	. .	. .	. .	218
	Public enterprise income—					
22*b*	Paid to general government	57	64	40	26	12
17	Retained income	108	112	174	181	209
		165	*176*	*214*	*207*	*221*
	Company income—					
15*c*	Income tax payable	120	142	179	192	n.a.
13*k*	Dividends paid	77	96	118	126	n.a.
16*b*	Undistributed income	177	186	184	174	n.a.
		374	*424*	*481*	*492*	*398*
	Disbursements	**1,942**	**2,242**	**2,627**	**3,318**	**4,193**

TABLE 9

HOUSEHOLD (INCLUDING UNINCORPORATED ENTERPRISES) INCOME AND OUTLAY ACCOUNT

($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Net operating surplus—					
11*l*	Dwellings owned by persons	1,561	1,803	2,084	2,479	3,069
11*m*	Unincorporated enterprises	3,519	4,015	5,034	6,707	6,159
13*l*	*Less* Interest, etc., paid relating thereto	924	1,038	1,244	1,685	2,169
25*b*	Third party insurance transfers to persons	30	36	39	51	65
	Income from unincorporated enterprises and dwellings owned by persons	4,126	4,744	5,835	7,450	6,994
10	Wages, salaries and supplements	17,936	20,068	22,417	27,518	35,190
13*i*	Interest on life and superannuation funds (imputed)					
13*m*	Other interest, etc., received	531	604	689	755	877
13*n*	Dividends received	856	975	1,155	1,574	2,098
	Transfers from general government—	536	583	593	606	595
23*a*	Cash benefits	1,854	2,168	2,694	3,256	4,531
23*b*	Unfunded employee retirement benefits	. .	. .	. .	65	88
25	Third party insurance transfers	69	80	89	117	148
14*c*	Transfers from overseas	181	226	238	223	245
	Receipts	**26,089**	**29,448**	**33,710**	**41,564**	**50,766**
1	Private final consumption expenditure	19,991	22,189	24,836	29,072	34,541
13*o*	Consumer debt interest	220	239	277	432	538
15*d*	Income tax payable	3,123	3,815	4,103	5,835	7,144
24	Other direct taxes, fees, fines, etc.	408	440	488	559	580
14*a*	Transfers overseas	134	172	217	253	235
18	Saving	2,213	2,593	3,789	5,413	7,728
	Disbursements	**26,089**	**29,448**	**33,710**	**41,564**	**50,766**

TABLE 10

GENERAL GOVERNMENT INCOME AND OUTLAY ACCOUNT

($ million)

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
22	Income from public enterprises	687	793	777	691	567
13*p*	Interest, etc., received	278	298	340	414	524
12*a*	Indirect taxes	3,587	4,079	4,552	5,629	6,999
	Direct taxes on income—					
15*e*	Companies, etc.	1,427	1,519	1,617	2,013	2,431
15*f*	Households	3,175	3,765	4,084	5,485	7,709
24	Other direct taxes, fees, fines, etc.	408	440	488	559	580
	Receipts	**9,562**	**10,894**	**11,858**	**14,791**	**18,810**
2	Final consumption expenditure	4,198	4,760	5,441	6,756	9,092
12*b*	Subsidies	289	388	323	279	328
13*q*	Interest, etc., paid	832	909	1,008	1,068	1,288
	Transfers to persons—					
23*a*	Cash benefits	1,854	2,168	2,694	3,256	4,531
23*b*	Unfunded employee retirement benefits	. .	. .	. .	65	88
20	Grants for private capital purposes	51	55	75	87	133
14*b*	Transfers overseas	185	206	252	289	350
19	Surplus on current transactions	2,153	2,408	2,065	2,991	3,000
	Disbursements	**9,562**	**10,894**	**11,858**	**14,791**	**18,810**

TABLE 11

MAIN AGGREGATES AT CURRENT PRICES, 1951-52 TO 1974-75

($ million)

	1	*2*	*3*	*4*	*5*	*6*	*7* (*1 to 6*)
	Final consumption expenditure		*Private gross fixed capital expenditure*	*Public gross fixed capital expenditure*	*Increase in stocks*	*Statistical discrepancy*	*Gross national expenditure*
Year	*Private*	*Government*					
1951–52	5,023	803	1,132	806	377	70	8,211
1952–53	5,334	925	1,143	794	−294	−239	7,661
1953–54	5,860	874	1,320	808	109	−107	8,864
1954–55	6,375	936	1,482	871	166	42	9,872
1955–56	6,852	1,043	1,640	927	229	−52	10,639
1956–57	7,327	1,086	1,717	950	−45	−158	10,877
1957–58	7,682	1,121	1,858	998	56	−7	11,708
1958–59	8,089	1,223	1,922	1,100	253	−71	12,516
1959–60	8,874	1,312	2,191	1,214	168	111	13,870
1960–61	9,416	1,410	2,415	1,256	478	42	15,017
1961–62	9,703	1.529	2,328	1,402	−219	−74	14,669
1962–63	10,400	1,634	2,580	1,443	253	−102	16,205
1963–64	11,225	1,785	2,913	1,603	120	−96	17,550
1964–65	12,145	2,043	3,403	1,866	560	17	20,034
1965–66	12,920	2,384	3,660	2,059	113	−114	21,022
1966–67	13,954	2.702	3,829	2,180	363	−223	22,805
1967–68	15,258	3,052	4,168	2,366	146	−329	24,661
1968–69	16,507	3,334	4,731	2,531	669	−335	27,437
1969–70	18,156	3,634	5,167	2,746	448	−195	29,956
1970–71	19,991	4,198	5,851	2,927	327	−318	32,976
1971–72	22,189	4,760	6,311	3,294	−113	−151	36,290
1972–73	24,836	5,441	6,586	3,469	−340	216	40,208
1973–74	29,072	6,756	7,956	3,964	1,602	1,195	50,545
1974–75	34,541	9,092	8,788	5,364	836	547	59,168

	8	*9*	*10* (*7 + 8 — 9*)	*11*	*12*	*13*	*14*
Year	*Exports of goods and services*	*Imports of goods and services*	*Gross domestic product*	*Gross domestic product at factor cost*	*National income*	*Household income*	*Wages, salaries and supplements*
1951–52	1,493	2,437	7,267	6,453	6,852	6,297	3,935
1952–53	1,893	1,312	8,242	7,452	7,753	7,047	4,255
1953–54	1,750	1,601	9,013	8,118	8,419	7,377	4,534
1954–55	1,714	1,983	9,603	8,623	8,908	7,897	4 964
1955–56	1,719	1,953	10,405	9,342	9,612	8,572	5,444
1956–57	2.191	1,736	11,332	10,135	10,472	9,158	5,758
1957–58	1,805	1,925	11,588	10,291	10,546	9,163	5,980
1958–59	1,892	1,960	12,448	11,100	11.306	9,864	6,273
1959–60	2,134	2,286	13,718	12,243	12,472	10,834	6,961
1960–61	2,177	2,603	14,591	13,020	13,228	11,644	7,500
1961–62	2,464	2,205	14,928	13,382	13,490	12,052	7,722
1962–63	2,504	2,620	16,089	14,446	14,530	12,816	8,148
1963–64	3,169	2,873	17,846	16,074	16,133	14,196	8,860
1964–65	3,049	3,485	19,598	17,641	17,713	15,498	9,906
1965–66	3,151	3,629	20,544	18,407	18,479	16,251	10,674
1966–67	3,477	3,711	22,571	20,305	20,298	17,954	11,636
1967–68	3,577	4,155	24,063	21,586	21,575	18,850	12,645
1968–69	3,913	4,276	27,074	24,338	24,337	21,101	13,974
1969–70	4,749	4,764	29,941	26,922	26,912	23,275	15,654
1970–71	5,070	5,118	32,928	29,630	29,717	26,089	17,936
1971–72	5,633	5,194	36,729	33,038	33,260	29,448	20,068
1972–73	6,949	5,327	41,830	37,601	38,130	33,710	22,417
1973–74	7,774	7,650	50,669	45,319	46,770	41,564	27,518
1974–75	9,782	9,947	59,003	52,332	54,555	50,766	35,190

Description of items in the National Income and Expenditure Accounts

Item 1. *Final consumption expenditure—private.* Net expenditure on goods and services for purposes of consumption by persons and private non-profit organisations serving households. This item excludes the purchase of dwellings and capital expenditure by unincorporated businesses and non-profit organisations (included in item 3), and maintenance of dwellings (treated as expenses of private enterprises), but includes personal expenditure on motor vehicles and other durable goods and the imputed rent of owner-occupied dwellings. Purchase of motor vehicles is the estimated expenditure by persons on new motor vehicles, second-hand motor vehicles purchased from business enterprises and general government, and net dealers' margins on purchases and sales of motor vehicles between persons. Motor vehicles include cars, station wagons, motor cycles, and motor scooters bought for personal use. The value of food produced and consumed on farms is included, and the payment of wages and salaries in kind (e.g. food and lodging provided free to employees) is included in both household income and private final consumption expenditure. Goods and services purchased by business or general government, e.g. as expense-account allowances to employees, are excluded.

Item 2. *Final consumption expenditure—government.* Expenditure by public authorities (other than those classified as public enterprises) which does not result in the creation of fixed tangible assets or in the acquisition of land, buildings or second-hand goods. It comprises expenditure on wages, salaries, and supplements, and on goods and services other than fixed assets and stocks. Fees, etc., charged by general government for goods sold and services rendered are offset against purchases. Net expenditure overseas by general government and purchases from public enterprises are included. All government expenditure on defence is classified as final consumption expenditure.

Item 3. *Gross fixed capital expenditure—private.* Expenditure on fixed assets whether for additions or replacements. This item includes expenditure on dwellings (item 3*a*), other building and construction (item 3*b*), and vehicles, plant machinery, etc. (item 3*c*). It includes also expenditure on second-hand assets as well as new assets, less sales of existing assets. Expenditure on ordinary repair and maintenance of fixed assets is excluded as being chargeable to current account. Major additions are, however, regarded as capital expenditure. Dwellings purchased by persons from public housing authorities, including previously rented houses, are included in private capital expenditure. Net purchases of other land and buildings are not included.

Item 4. *Gross fixed capital expenditure—public enterprises.* Expenditure on new fixed assets whether for additions or replacements, including wages and salaries paid by public enterprises in connection with capital works. Expenditure on houses and flats is estimated by deducting the cost of previously rented dwellings sold to the private sector from the estimated expenditure on construction of dwellings. The sales value of these previously rented dwellings is included in private capital expenditure.

Item 5. *Gross fixed capital expenditure—general government.* Expenditure on new fixed assets whether for additions or replacements, other than for defence purposes. Because it has not been possible to make a satisfactory dissection, all expenditure on roads, including maintenance, is classified as fixed capital expenditure.

Item 6. *Increase in stocks.* The increase in stocks of enterprises and general government. The increase in stocks is calculated on a quarterly basis as the difference between the beginning and end-of-quarter estimates of stock levels, both revalued at average current-quarter prices by means of appropriate price indexes. In Tables 4 and 5 this item is subdivided into two components:

Item 6*a*. *Farm and miscellaneous.* This consists of increases in farm stocks and public authority stocks.

Item 6*b*. *Private non-farm.* This is the increase in stocks of private non-farm enterprises.

Item 7. *Statistical discrepancy.* The difference between the sum of the direct estimates of gross domestic product and imports of goods and services on the one hand and the sum of the estimates of components of gross national expenditure and exports of goods and services on the other hand. Conceptually these two totals are the same. Inclusion of the discrepancy on the expenditure side of the domestic production account implies nothing as to the relative accuracy of the estimates of gross domestic product and national expenditure. Similarly its inclusion in the capital account does not imply that estimates in this table are less accurate than those in other tables, or that capital expenditure estimates are less accurate than estimates on the receipts side of this account.

Item 8. *Exports of goods and services.* The value of goods exported overseas and receipts from overseas for other goods and services. In Table 6 this item is sub-divided into the following components.

Item 8a. Exports f.o.b. The recorded trade figures adjusted for balance of payments purposes. The adjustments are similar to those made to the recorded import figures except that no change is made to the basis of valuation.

Item 8b. Transportation (receipts). The expenditure of overseas carriers in Australian ports, the overseas earnings of Australian shipping and airline operators in respect of passenger fares, and their earnings from freight on exports from Australia, carriage of goods between foreign ports, etc.

Item 8c. Travel (receipts). Expenditure in Australia of persons visiting for pleasure or business, including expenditure in Australia of students studying under the Colombo Plan.

Item 8d. Government transactions (receipts). Includes receipts for services rendered by the Commonwealth government to other governments and international organisations, including services provided under joint defence projects and payments in Australia by foreign governments on diplomatic, consular and trade representation and for pensions.

Item 8e. Other goods and services (receipts). The value of Australian production of gold (including recoveries from scrap) less net industrial usage, business expenses of overseas firms in Australia, and commissions, brokerage, etc.

Item 9. Imports of goods and services. The value of goods imported from overseas and amounts payable overseas for services. In Table 6 this item is sub-divided into the following components.

Item 9a. Imports f.o.b. Recorded trade figures adjusted for the purpose of balance of payments estimates. The principal adjustments are the deduction of a 'valuation adjustment' representing the excess of the recorded value of imports (based on value for duty) over the estimated selling price to the importer as shown on invoices accompanying customs entries, the addition of unrecorded imports including ships and aircraft for use on overseas routes, and the subtraction of films imported on a rental basis, imports of gold, passengers' personal effects, goods for repair and goods intended for re-export.

Item 9b. Transportation (payments). Freight payable to foreign carriers on goods imported into Australia and transported between Australian ports and fares payable in Australia to overseas shipping and airline companies. It also includes the overseas expenditure of Australian ships and aircraft, and net marine insurance payable overseas in respect of both exports and imports.

Item 9c. Travel (payments). Expenditure in other countries by Australians visiting overseas for pleasure or business.

Item 9d. Government transactions (payments). Expenditure overseas for defence, including the pay and allowances of personnel serving overseas, expenditure overseas on diplomatic, consular and trade representation, government pensions paid abroad, administrative expenditure overseas on immigration, and other miscellaneous payments for services.

Item 9e. Other goods and services (payments). Administrative and promotional expenditure overseas by Australian firms, cinema and television film rentals and commissions, brokerage, etc., payable overseas, and the value of repairs on goods previously exported for repair and return.

Item 10. Wages, salaries and supplements. Payments by producers to their employees in the nature of wages and salaries as defined for pay-roll tax, including allowances for income in kind (board and quarters, etc.), together with supplements to wages, and pay and allowances of members of the forces. Employees cover all persons engaged in the activities of incorporated business units and in the production of government services and services of non-profit organisations, members of the armed forces, and all persons engaged in the activities of unincorporated enterprises except the proprietors and unpaid members of the family. In addition to wages and salaries paid by employers subject to pay-roll tax, this item includes wages and salaries paid by employers not subject to pay-roll tax, based on estimates of employment and average earnings. To be consistent with the definition of the workforce, payments to trainee teachers are excluded from estimates of wages and salaries. Supplements consist of employers' contributions to pension and superannuation funds, direct payments of pensions and retiring allowances, and amounts paid as workers' compensation for injuries. Employers' contributions to pension and superannuation funds, in general, reflect the accruing liability to employees. Some governments contribute to their superannuation funds only as payments of benefits are made. In such cases it would be proper to impute payments as the liability accrues. This has not been done in these estimates except in respect of the Postal and Telecommunications Commissions where, in their commercial accounts, the accruing liability is debited as a working expense. Pay and allowances of members of the forces consist of active pay, field, subsistence and dependants' allowances, and the value to the members of the forces of food, clothing, normal medical attention, etc., supplied in kind. They include deferred pay, but exclude war gratuities which are included in item 23.

Item 11. *Gross operating surplus.* The operating surplus, before deduction of depreciation provisions, dividends, interest, royalties and land rent, and direct taxes payable, but after deducting stock valuation adjustment, of all enterprises, trading and financial, from operations in Australia. It is the excess of gross output over the sum of intermediate consumption, wages, salaries and supplements, and indirect taxes less subsidies. Gross operating surplus includes third party motor vehicle and public risk insurance claims paid to persons in respect of policies taken out by enterprises. Trading enterprises include all companies, public enterprises, partnerships and self-employed persons engaged in the production of goods and services for sale, but exclude financial enterprises. Public trading enterprises are government undertakings which attempt to recover all, or a substantial part, of their costs through charges made to the public for the sale of goods and services. All owners of dwellings are included whether they let the dwellings or occupy them themselves. Trading enterprises' gross operating surplus is shown separately for companies (item 11*a*), unincorporated enterprises (item 11*b*), dwellings owned by persons (item 11*c*), and public enterprises (item 11*d*). Financial enterprises comprise banks, insurance offices, superannuation funds and other enterprises primarily engaged in incurring liabilities and acquiring financial assets in the market. The gross operating surplus of financial enterprises (item 11*e*) includes an imputed bank service charge which represents a reclassification of a part of interest receipts as a charge for organising finance in contrast to a pure interest element. The imputed bank service charge (item 11*f*) is not allocated among customers (which would have the effect of reducing their respective operating surpluses), but is shown in the production account as a negative adjustment to operating surpluses generally. *Net operating surplus* (item 11*g*) is, in principle, the operating surplus after providing for the consumption of fixed capital, and is estimated by deducting depreciation allowances from gross operating surplus. Net operating surplus is shown separately for trading enterprise companies (item 11*i*), public trading enterprises (item 11*j*), financial enterprises (item 11*k*), dwellings owned by persons (item 11*l*) and unincorporated enterprises (item 11*m*). *Depreciation allowances* (item 11*h*) are financial provisions made for depreciation and represent in the main amounts allowed under income tax legislation, but include also the estimated depreciation on tenanted and owner-occupied dwellings and provisions made by public enterprises.

Item 12. *Indirect taxes less subsidies.* Indirect taxes (item 12*a*) are taxes assessed on producers, i.e. enterprises and general government, in respect of the production, sale, purchase or use of goods and services, which are charged to the expenses of production. Subsidies (item 12*b*) are grants made by general government to enterprises which are credited to their production accounts. These grants may take the form of bounties on goods produced, payments to ensure a guaranteed price or to enable maintenance of prices of goods or services below cost of production, and other forms of assistance to producers. Losses of public trading enterprises are included in *income from public enterprises.*

Item 13. *Dividends and interest, etc.* Receipts and payments of dividends including dividends paid overseas and the remitted profits of Australian branches of overseas enterprises; and receipts and payments of interest, royalties and land rent. In most tables dividends are shown separately from interest etc. The items are shown net of intra-sector receipts and payments. *Net income paid overseas* comprises payments of dividends and interest etc. to overseas less receipts of dividends and interest etc. from overseas. *Interest on life and superannuation funds imputed to households* (13*i*), represents the net earnings after tax, of these funds from dividends, interest, rental charges and other income which are accumulated for the benefit of policy holders and members.

Item 14. *Transfers to and from overseas.* All transfers to or from overseas on public authority or private account which are not payments for goods and services or payments of dividends, interest, etc.

Item 14*a*. *Personal transfers overseas.* Gifts of money by resident persons and private institutions, payments for sustenance, and transfers of emigrants' funds and legacies from Australia to overseas, together with the value of goods exported as gifts.

Item 14*b*. *General government transfers overseas.* Grants to, and payments made on behalf of Papua New Guinea and expenditure overseas in respect of technical assistance and relief under the Colombo Plan and United Nations and other aid projects. Includes contributions to United Nations and other international organisations due by virtue of membership of these organisations.

Item 14*c*. *Personal transfers from overseas.* Gifts of money received from non-resident persons and private institutions, receipts for sustenance, and transfers of immigrants' funds and legacies from overseas to Australia, together with the value of goods imported as gifts.

Item 14*d*. *Extraordinary insurance claims from overseas.* Claims arising out of the Darwin cyclone of 25 December 1974. See also note to item 26.

Item 15. *Income tax.* Income tax payable by trading and financial companies (15*a* and 15*c*), life and superannuation funds (15*b*) and households (15*d*) are amounts payable at rates of taxation applicable in each year. Income tax payable by households includes the total income tax payable by individuals on all forms of income, whether wages, business income or property income. *Increase in income tax provisions*, the difference between the amounts of income tax payable in respect of the income of the year and the cash receipts by general government during the year, is a component of the savings of the nation.

Item 16. *Undistributed income.* The undistributed income of companies comprising trading enterprise companies (item 16*a*) and financial enterprise companies (item 16*b*) is the balance of company income, including dividends received from other sectors (items 13*d* and 13*h*) after deduction of income tax payable and dividends paid. No imputation is made to the beneficial owners and therefore the whole of the undistributed income is regarded as saving by resident enterprises. The income, and consequently the undistributed income, of financial enterprise companies includes increases in provisions for unexpired risks of casualty insurance companies and health insurance funds.

Item 17. *Retained income of public financial enterprises.* The net income of public financial enterprises (mainly government banks and insurance offices) less payments from net income to general government. The payments to general government may be described in the accounts of the enterprises as dividends, income tax, payments in lieu of income tax or transfers of profit. The retained income of public financial enterprises includes increases in provisions for unexpired risks of government insurance offices on casualty insurance, but excludes net earnings on life insurance funds (item 13*i*).

Item 18. *Household saving.* The excess of household income over the sum of private final consumption expenditure, interest paid, income tax payable, other direct taxes, fees, fines, etc., and transfers overseas. Household saving is estimated as the balancing item in the household income and outlay account. It includes saving through life insurance and superannuation funds (including net earnings on these funds) and the increase in assets with marketing boards. Household saving may also take the form of increases in holdings of cash and net purchases of securities, the net increase in bank deposits less advances, the reduction in the outstanding advances of instalment credit companies to households and the increase in the equity of households in dwellings and in capital equipment, buildings and stocks of unincorporated enterprises.

Item 19. *Surplus on general government current transactions.* The excess of income, including the whole of the net income of public trading enterprises, over current outlay. Current outlay includes final consumption expenditure, as defined in item 2, and transfer payments (interest, cash benefits, subsidies, grants for private capital purposes, and transfers overseas). The surplus is transferred to the general government capital account where it is shown as part of total funds available for financing capital accumulation.

Item 20. *General government grants for private capital purposes.* Grants to meet part of the costs of private capital expenditure, e.g. Home Savings grants, grants towards construction of science laboratories and libraries in private schools and of houses for aged persons, payments under the Currency Act in relation to the conversion of accounting and other machines following introduction of decimal currency; and compensation to primary industry marketing authorities for losses on overseas debts resulting from sterling devaluation.

Item 21. *Net lending.* The excess of net acquisition of financial assets by transactors over their net incurrence of liabilities. The net lending to overseas is the balance on current transactions in the overseas transactions account. However, it should be noted that it differs from the balance on current account shown in the balance of payments statistics by the net amount of undistributed income accruing overseas. The concept of net lending to overseas includes additions to overseas monetary reserves.

Item 22. *Public enterprise income paid to general government.* Includes the whole of the income of public trading enterprises and that part of the income of public financial enterprises which is paid to general government whether described by the enterprises as dividends, transfer of profits or as income tax. *Public enterprise income* for trading enterprises (item 22*a*) is equal to net operating surplus, being exclusive of interest received and before charging interest costs relating to the enterprises. (In principle interest receipts and payments of public corporate enterprises should be included in account 7 and only actual transfers to general government in account 10, but all interest costs and interest receipts of public trading enterprises are included with other interest transactions in the general government income and outlay account pending satisfactory identification of the interest relating to public trading enterprises.) *Public enterprise income* for financial enterprises (items 22*b* plus 17) is the net income after depreciation allowances, interest paid and working expenses are deducted from receipts of interest and charges for services. Depreciation allowances deducted in arriving at the income of public trading and financial enterprises are those shown in their published accounts, except in the case of some trading enterprises whose accounts, included in the Commonwealth or State budgets, are analysed on the basis of their cash accounts (in which depreciation is not charged).

Item 23. *Transfers to persons.* Consists of *cash benefits* (item 23*a*) and *unfunded employee retirement benefits* (item 23*b*). *Cash benefits* includes current transfers to persons from general government in return for which no services are rendered or goods supplied. Principal components are scholarships, hospital, medical, pharmaceutical, maternity, sickness and unemployment benefits; child endowment, widows', age, invalid and repatriation pensions; payments to trainee teachers; and attendance money for waterside workers. *Unfunded employee retirement benefits* covers direct payments of pensions, etc., to employees by way of unfunded retirement benefit schemes.

Item 24. *Other direct taxes, fees, fines, etc.* Estate and gift duties paid and all other taxes, fees for services of a regulatory character, fines and gifts paid by persons to general government. Also included are employee contributions to unfunded retirement benefit schemes.

Item 25. *Third party insurance transfers.* These are amounts which are indirectly transferred from insured enterprises to persons in respect of claims paid to persons on third party motor vehicle and public risk insurance policies taken out by enterprises. The estimates of these claims have been allocated between trading enterprise companies (item 25*a*) and unincorporated enterprises (item 25*b*). No amount has been allocated to financial and public enterprises.

Item 26. *Extraordinary insurance claims paid.* Claims paid by casualty insurance companies relate to the excess of actual claims over 'normal' claims for the year 1974–75. This excess resulted from claims for damages caused by the Darwin cyclone of 25 December 1974. These insurance claims are given special treatment in the accounts in order not to distort the estimates (by sector) of gross operating surplus, depreciation and disposable income.

CHAPTER 17

PRIVATE FINANCE

Current information on the subjects dealt with in this chapter is contained in the *Monthly Review of Business Statistics* (1.4), the *Digest of Current Economic Statistics* (1.5) (monthly), and the following mimeographed statements: monthly—*Banking Statistics* (5.2); *Major Trading Banks Statistics* (preliminary statement) (5.3); *Savings Bank Statistics* (preliminary statement) (5.28); *Housing Finance for Owner Occupation—Savings Banks and Trading Banks* (5.57); *Life Insurance Statistics* (5.17); *Finance Companies* (5.14); *Instalment Credit for Retail Sales* (5.46); *Housing Finance for Owner Occupation—Permanent Building Societies* (5.58); *Housing Finance for Owner Occupation* (5.56); quarterly—*New Capital Raisings by Companies in Australia* (bulletin (5.9) and preliminary statement (5.10)); *Capital Expenditure by Private Business in Australia* (5.8) (5.7); *Unit Trusts, Land Trusts and Mutual Funds* (5.31). Other relevant annual mimeographed bulletins are *Life Insurance* (5.32); *General Insurance, Australia* (5.16); *Government Pension and Superannuation Schemes* (5.23); *Survey of Selected Private Pension Funds* (5.25); *Finance Company Transactions* (5.13); and *Building Societies, Australia* (5.5).

MONEY

Currency

Australia has a decimal system of currency, the unit being the dollar which is divided into 100 cents. Decimal coins and notes became legal tender on the 14 February 1966. Before that date the Australian currency unit was the pound divided into 20 shillings each of 12 pence. One dollar in the present currency is equal to 10 shillings in the old currency.

The *Reserve Bank Act* 1965 authorised the Reserve Bank of Australia to issue Australian notes in denominations of $1, $2, $5, $10, $20, and $50, and any other denomination that the Treasurer, by instrument in writing published in the Gazette, determines. All Australia's coin requirements are met by the Royal Australian Mint, Canberra.

For additional information on note issue and coinage refer to List of Special Articles, etc., at end of this Year Book.

AUSTRALIAN NOTES IN CIRCULATION
($'000)

	Last Wednesday in June				
	1972	*1973*	*1974*	*1975*	*1976*
$1 and 10s	43,552	48,487	53,196	52,657	53,561
$2 and £1	118,451	123,670	130,195	129,098	127,834
$5	85,283	94,378	103,525	110,239	116,407
$10 and £5	560,268	639,899	701,083	675,172	655,151
$20 and £10	691,476	851,381	960,629	1,186,745	1,334,591
$50	..	..	197,462	403,158	633,848
£50	38	8	8	7	3
£100	31	19	18	17	12
Total	**1,499,099**	**1,757,842**	**2,146,116**	**2,557,092**	**2,921,408**
Held by Banks	*182,648*	*229,222*	*300,787*	*339,943*	*352,500*
Held by Public	*1,316,451*	*1,528,620*	*1,845,329*	*2,217,149*	*2,568,908*

AUSTRALIAN DECIMAL COIN: COSTS OF COIN ISSUED

($'000)

	Cost of metal	*Cost of minting*	*Freight and sundry charges*	*Total cost*	*Face value of coin issued*	*Surplus*
Cupro-nickel—						
1970–71	974	960	65	1,999	15,050	13,051
1971–72	721	698	77	1,496	10,758	9,262
1972–73	738	1,010	55	1,803	11,190	9,387
1973–74	1,298	1,333	67	2,699	16,600	13,901
1974–75	1,731	2,190	158	4,080	22,454	18,374
Bronze—						
1970–71	703	675	36	1,414	2,068	654
1971–72	594	738	24	1,356	2,185	829
1972–73	712	1,066	46	1,824	2,795	971
1973–74	1,343	1,708	97	3,148	4,179	1,031
1974–75	756	1,719	111	2,587	2,994	407
Total—						
1970–71	1,677	1,635	101	3,413	17,118	13,705
1971–72	1,315	1,436	101	2,852	12,943	10,091
1972–73	1,450	2,076	101	3,627	13,985	10,358
1973–74	2,641	3,041	165	5,847	20,779	14,932
1974–75	2,487	3,910	270	6,667	25,449	18,782

AUSTRALIAN DECIMAL COIN: VALUE OF COIN ISSUED

($'000)

Year ended 30 June—	*50 cents*	*20 cents*	*10 cents*	*5 cents*	*2 cents*	*1 cent*	*Total*
1971	7,420	3,640	2,090	1,900	1,150	919	17,119
1972	4,418	3,360	1,740	1,240	1,370	815	12,943
1973	3,970	3,380	2,040	1,800	1,700	1,095	13,985
1974	5,406	4,990	3,039	3,165	2,689	1,490	20,779
1975	7,027	7,627	4,555	3,245	1,877	1,117	25,449

Overseas exchange rates

In the following table the rates shown are mainly the averages of daily quotations by the Commonwealth Trading Bank of Australia, and in other cases are the rates used by the Bureau of Customs in converting import values to Australian dollars for purposes of calculating customs duty.

OVERSEAS EXCHANGE RATES: AVERAGE TELEGRAPHIC TRANSFER SELLING RATES FOR SYDNEY ON OVERSEAS COUNTRIES, 1975-76

Country	*Basis of quotation*	*Australian decimal currency equivalents*
		Selling rate 1975–76
America, United States of	Dollars to $A1	1.2588
Austria	Schillings to $A1	22.80
Belgium(*a*)		
(financial)	Francs to $A1	50.11
(convertible)	Francs to $A1	48.65
Canada	Dollars to $A1	1.2598
China, People's Rep. of	New Yuan to $A1	2.435
Denmark	Kroner to $A1	7.56
Fiji	Dollars to $A1	1.076
France	Francs to $A1	5.622
Germany, Fed. Rep. of	Deutsche Marks to $A1	3.213
Greece	Drachmae to $A1	43.11
Hong Kong	Dollars to $A1	6.250
India	Rupees to $A1	11.135
Italy	Lire to $A1	925
Japan	Yen to $A1	376.06
Netherlands	Guilders to $A1	3.336
New Zealand	Dollars to $A1	1.191
Norway	Kroner to $A1	6.88
Noumea	Francs to $A1	102.24
Philippines	Pesos to $A1	9.214
Singapore	Dollars to $A1	3.090
South Africa, Republic of	Rands to $A1	1.0376
Spain	Pesetas to $A1	77.73
Sri Lanka	Rupees for $A1	9.789
Sweden	Kroner to $A1	5.466
Switzerland	Francs to $A1	3.250
Taiwan	Dollars to $A1	25.31
United Kingdom	Pounds to $A1	0.630

(*a*) Two rates quoted from 20 September 1971: 'convertible' rate for trade transactions accompanied by documentation and 'financial' rate for other transactions.

Volume of money

The statistics of volume of money compiled by the Reserve Bank of Australia include notes and coin in the hands of the public, deposits of the public with trading banks and deposits with all savings banks. As far as possible, all components of this series in the table below have been calculated on a weekly average basis. Deposits of the public with trading banks comprise the actual weekly average of current and fixed deposits with trading banks less both the actual weekly average of the Commonwealth and State Government current and fixed deposits and a weekly average of inter-bank current and fixed deposits. Inter-bank deposits mainly comprise savings bank deposits with trading banks and deposits of overseas banks with trading banks in Australia. Certificates of deposit include any holdings by the Commonwealth and State Governments and banks. Deposits of the public with trading banks also include the actual weekly average of deposits of the public with the Reserve Bank of Australia. Deposits with all savings banks comprise an interpolated "weekly average" based on end-of-month figures of total deposits with all savings banks.

VOLUME OF MONEY: AUSTRALIA

(*Source:* Reserve Bank of Australia)

($ million)

Average of weekly figures for June	*Notes and coin in hands of public*	*Deposits of public with all trading banks(a)*			*Deposits with all savings banks(b)*	*Total volume of money*
		Current	*Fixed*	*Certificates of deposits*		
1972(*c*)	1,467	4,328	3,260	113	8,339	17,508
1973(*c*)	1,702	5,615	4,108	447	10,129	22,001
1974	1,957	5,424	3,943	2,556	11,139	25,018
1975	2,356	5,971	6,740	1,144	(*d*)12,656	(*d*)28,867
1976	2,754	6,788	7,577	1,077	14,651	32,846

(*a*) Current and fixed deposits exclude the Commonwealth and State Government and inter-bank deposits but include deposits of the public with the Reserve Bank; certificates of deposit include any holdings by the Commonwealth and State Governments and banks. (*b*) Interpolated 'Weekly average' based on end-of-month figures. (*c*) Includes Papua New Guinea. (*d*) Data from June 1975 have been revised to reflect a change in accounting procedure by one bank.

BANKING

The Australian banking system has developed along the lines of the United Kingdom system with widespread branch banking conducted by relatively few banks.

Development since federation

With federation in 1901 the new Commonwealth Parliament was given power, under Section 51 of the Commonwealth Constitution, to legislate with respect to 'Banking, other than State Banking, also State Banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money'. In 1911 the Commonwealth entered the field of banking with the establishment of the Commonwealth Bank of Australia, which conducted both trading bank and savings bank operations. A separate Commonwealth Savings Bank was established in 1928.

Central bank

Central banking functions of the Commonwealth Bank developed gradually over the years prior to and during the second world war. In November 1935 a Royal Commission was appointed by the Commonwealth Government to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interests of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report in July 1937, and a summary of the recommendations appears in Year Book No. 31, page 1010.

In 1945 the Commonwealth Government legislated to give full legal effect to the central banking functions already being exercised by the Commonwealth Bank of Australia and to regulate the banking system as a whole. The Commonwealth Bank of Australia further developed mainly as a central bank when from 3 December 1953 the Commonwealth Trading Bank of Australia was established to take over most of the general trading bank functions of the Commonwealth Bank of Australia.

Legislation in 1959 completed the separation of the trading and central banking functions of the Commonwealth Bank of Australia with the establishment of the Commonwealth Development Bank of Australia under the *Commonwealth Banks Act* 1959 to take over the Industrial Finance Department and Mortgage Bank Department of the Commonwealth Bank of Australia.

A new bank, the Reserve Bank of Australia, was established under the *Reserve Bank Act* 1959 as the nation's central bank to administer the provisions of a new banking Act (*Banking Act* 1959). A statutory corporation. the Commonwealth Banking Corporation, was set up under the *Commonwealth Banks Act* 1959 to control the Commonwealth Trading Bank of Australia, the Commonwealth Development Bank of Australia, and the Commonwealth Savings Bank of Australia.

Trading banks

Commercial banking in Australia is carried on by thirteen trading banks. Six large private trading banks together with the Commonwealth Trading Bank are generally referred to as the major trading banks. These banks provide widespread banking facilities throughout Australia. The remaining six banks comprise one small local bank, two overseas banks which have been represented in Australia for many years and three State-owned banks operating only within their respective States.

The major trading banks are as follows: Commonwealth Trading Bank of Australia, Australia and New Zealand Banking Group, The Bank of Adelaide, Bank of New South Wales, The Commercial Bank of Australia Ltd, The Commercial Banking Company of Sydney Ltd, and The National Bank of Australasia Ltd.

The other trading banks are: Bank of Queensland Ltd, Bank of New Zealand, Banque Nationale de Paris, The Rural Bank of New South Wales, State Bank of South Australia, The Rural and Industries Bank of Western Australia (Rural Department), and the Bank of China up to 20 December 1972.

Term Loan Fund

Lending by trading banks is generally conducted on an overdraft basis. A departure from this practice followed discussions during 1961–62 involving the Commonwealth Government, the Reserve Bank and the major trading banks, which resulted in arrangements whereby the banks agreed to create a fund known as the Term Loan Fund, the resources of which would be employed to make loans for capital expenditure on production in the rural, industrial and (to a lesser extent) commercial fields and to finance exports. The loans would be made for fixed terms, varying usually between three and eight years. The term lending arrangements operated from April 1962.

Farm Development Loan Fund

Discussions in March 1966 between the Commonwealth Government, the Reserve Bank and the major trading banks resulted in the establishment of a fund known as the Farm Development Loan Fund, from which resources would be available to provide rural producers, particularly smaller producers, with greater access to medium and long-term finance. The Fund was established in April 1966.

Savings banks

Prior to 1956 savings banks operations were conducted by the Commonwealth Savings Bank, two trustee savings banks in Tasmania, and State-owned banks in Victoria, South Australia and Western Australia. In January 1956 private savings banks were established as subsidiary companies by two of the private trading banks. By mid-1962 all the major private trading banks had established savings bank subsidiary companies. In May 1972 the Bank of New Zealand Savings Bank Limited was granted an authority to carry on savings bank business in Australia.

Development banks

The Commonwealth Development Bank of Australia was established by the *Commonwealth Banks Act* 1959 and commenced operations on 14 January 1960. The Australian Resources Development Bank was established by the major trading banks with the support of the Reserve Bank of Australia and commenced operations in February 1968. For further information on these banks *see* pages 526–7.

Current legislation

Operations of banks and banking in Australia are currently governed by (i) Commonwealth legislation enacted in 1959 in respect of banking other than State banking, and (ii) State legislation relating to the incorporation of banks and management of State banks.

Commonwealth banking legislation

(*a*) The *Banking Act* 1959 applies to all banks operating in Australia including the external Territories of the Commonwealth except State banks trading in their own State. The objects of the Act are: (i) to provide a legal framework uniform throughout Australia for regulating the banking system; (ii) to safeguard depositors of the banks from loss; (iii) to provide for the co-ordination of banking policy under the direction of the Reserve Bank; (iv) to control the volume of credit in circulation and bank interest rates; (v) to mobilise and to provide machinery for the control of the foreign exchange and gold resources of the Australian economy. A summary of the main provisions of the *Banking Act* 1959 is given in Year Book No. 46, pages 759–60.

(*b*) The *Reserve Bank Act* 1959 provides for the constitution and management of the Reserve Bank of Australia and the management of the Australian note issue.

(*c*) The *Commonwealth Banks Act* 1959 provides for the constitution and management of the Commonwealth Banking Corporation, Commonwealth Trading Bank of Australia, Commonwealth Savings Bank of Australia, and the Commonwealth Development Bank of Australia.

The Commonwealth Banking Corporation is the controlling body for the Commonwealth Trading Bank, Commonwealth Savings Bank and Commonwealth Development Bank. Under the *Banking Act* 1959 the Corporation and its constituent banks are subject to the same central banking controls as are the private trading banks.

State banking legislation

The State Acts under which the various banks are incorporated differ. While some of the older banks were incorporated by special Act or Charter, e.g. the Bank of New South Wales by Act of Council 1817, the Bank of Adelaide by Act of the South Australian Parliament, and the Bank of New Zealand by Act of the General Assembly of New Zealand, most of the banks are incorporated under a companies Act of the States or the United Kingdom. This is also the case with those banks which were reconstructed after the financial crisis of 1893. State banks, constituted under State Acts, transacting general banking business are The Rural Bank of New South Wales, the State Bank of South Australia, and the Rural and Industries Bank of Western Australia. State savings banks, constituted under State Acts, transacting savings bank business are The State Savings Bank of Victoria, The Savings Bank of South Australia and the Savings Bank Division of the Rural and Industries Bank of Western Australia.

Reserve Bank of Australia

The Reserve Bank of Australia preserved and continued in existence the original corporate body known as the Commonwealth Bank of Australia under the new name Reserve Bank of Australia. An account of the progress and development of that bank is given in earlier issues of the Year Book (*see* No. 37, pages 570–2, and No. 45, pages 735–7).

The general functions of the Reserve Bank are set out in Section 10 of the *Reserve Bank Act* 1959, which states:

> 'It is the duty of the Board, within the limits of its powers, to ensure that the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia and that the powers of the Bank under this Act, the *Banking Act* 1959, and regulations under that Act are exercised in such a manner as, in the opinion of the Board, will best contribute to,
>
> (*a*) the stability of the currency of Australia; (*b*) the maintenance of full employment in Australia; and (*c*) the economic prosperity and welfare of the people of Australia.'

In addition to its functions as a central bank, the Bank controls the Australian note issue through a Note Issue Department, provides special banking facilities through the Rural Credits Department, and acts as banker to the Commonwealth and some of the States.

Management

The policy of the Reserve Bank is determined by a Board consisting of the Governor (Chairman) the Deputy Governor, the Secretary to the Treasury, and seven other members appointed by the Governor-General. The Bank is managed by the Governor, who acts in accordance with the policy of the Board and with any directions of the Board. The Bank is required to inform the Government of the monetary and banking policy of the Board. In the event of a disagreement between the Government and the Board as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Governor-General, acting with the advice of the Executive Council, may determine the policy to be adopted by the Bank.

Central banking business

Under the *Commonwealth Bank Act* 1911 and the war-time powers conferred by the National Security Regulations the Commonwealth Bank gradually assumed the functions of a Central Bank. Part III of the *Commonwealth Bank Act* 1945 formally constituted the Bank as a Central Bank and granted the necessary powers to carry on the business of a Central Bank, these powers being carried through into the present Act constituting the Reserve Bank. Under the provisions of the *Reserve Bank Act* 1959 the capital for the Central Banking Business is the capital of the Commonwealth Bank for Central Banking purposes immediately prior to 14 January 1960, and such other sums as are transferred from the Reserve Bank Reserve Fund. The profits of the Bank are distributed as follows: (*a*) such sums as the Treasurer, after consultation with the Bank, determines shall be placed to the credit of the Reserve Bank Reserve Fund and (*b*) the remainder shall be paid to the Commonwealth.

Note Issue Department

The Note Issue Department, established in 1920 when the control of the Australian note issue was transferred from the Commonwealth Treasury to the Commonwealth Bank, was maintained in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, issue, re-issue and cancel Australian notes. Under the *Reserve Bank Act* 1959 the profits of the Note Issue Department are paid to the Commonwealth.

Rural Credits Department

The Rural Credits Department, established in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce, was continued in the same form under the *Reserve Bank Act* 1959. The Reserve Bank may, through this Department, make advances upon the security of primary produce placed under the legal control of the Bank, or other security associated with the production or marketing of primary produce, to co-operative associations or marketing boards formed under the laws of the Commonwealth or a State or Territory of the Commonwealth or other bodies specified by proclamation. The period of the advance shall not exceed one year. Under the provisions of the *Reserve Bank Act* 1959 the capital of the Rural Credits Department is the capital of the Rural Credits Department of the Commonwealth Bank immediately prior to 14 January 1960, and $4,000,000 provided by the Reserve Bank. The profits of the Rural Credits Department are dealt with as follows: (*a*) one-half to the credit of the Rural Credits Department Reserve Fund and (*b*) one-half to the credit of the Rural Credits Development Fund.

RESERVE BANK OF AUSTRALIA: LIABILITIES

($ million)

30 June—	Capital and reserve funds	Development fund	Special reserve—I.M.F. special drawing rights	Australian notes on issue	Deposits of trading banks		Deposits of savings banks	Other deposits, bills payable and other liabilities	Total
					Statutory reserve deposit accounts	Other			
CENTRAL BANKING BUSINESS									
1972	65.6	..	201.6	..	554.2	88.9	802.9	2,094.9	3,808.1
1973	45.6	..	192.4	..	784.1	39.4	1,323.0	2,346.7	4,731.2
1974	45.6	..	183.4	..	912.8	13.9	1,052.7	2,961.7	5,169.9
1975	45.6	..	207.0	..	417.9	37.8	908.0	2,897.9	4,514.1
1976	45.6	..	200.6	..	779.7	74.6	1,053.9	2,286.9	4,441.3
NOTE ISSUE DEPARTMENT									
1972	..	..	..	1,508.2	..	..	..	59.2	1,567.4
1973	..	..	..	1,767.4	..	..	..	24.0	1,791.4
1974	..	..	..	2,163.8	..	..	..	24.7	2,188.4
1975	..	..	..	2,545.1	..	..	..	25.3	2,570.4
1976	..	..	..	2,921.4	..	..	..	83.7	3,005.1
RURAL CREDITS DEPARTMENT									
1972	20.0	1.1	..	..	..	..	..	239.7	260.8
1973	20.7	0.7	..	..	..	..	..	184.5	206.0
1974	21.5	1.0	..	..	..	..	..	179.7	202.2
1975	22.6	1.1	..	..	..	..	..	179.6	203.4
1976	23.8	1.4	..	..	..	..	..	156.3	181.5
TOTAL									
1972	85.6	1.1	201.6	1,508.2	554.2	88.9	802.9	(a)1,361.6	(a)4,604.1
1973	66.3	0.7	192.4	1,767.4	784.1	39.4	1,323.0	(a)1,573.5	(a)5,746.9
1974	67.1	1.0	183.4	2,163.8	912.8	13.9	1,052.7	(a)2,100.0	(a)6,494.5
1975	68.2	1.1	207.0	2,545.1	417.9	37.8	908.0	(a)1,539.7	(a)5,724.8
1976	69.3	1.4	200.6	2,921.4	779.7	74.7	1,053.9	(a)1,269.7	(a)6,370.8

(a) Inter-departmental accounts have been offset.

RESERVE BANK OF AUSTRALIA: ASSETS

($ million)

30 June—	Gold and balances held abroad (a)	Other overseas securities	Australian notes, coin	Australian Government securities (b)	Cheques and bills of other banks	Loans, advances, bills discounted, all other assets(c)	Bank premises (d)	Bills receivable and remittances in transit	Total
CENTRAL BANKING BUSINESS									
1972	2,680.5	376.2	12.3	299.2	4.7	297.2	41.6	96.3	3,808.1
1973	3,152.1	525.8	9.7	411.0	9.4	446.0	49.5	127.6	4,731.2
1974	2,862.4	280.7	8.2	880.0	16.9	916.3	49.4	156.0	5,169.9
1975	2,976.7	120.5	8.7	593.9	46.9	522.4	50.0	195.0	4,514.1
1976	n.a.	n.a.	n.a.	818.4	n.a.	n.a.	53.4	n.a.	4,441.3
NOTE ISSUE DEPARTMENT									
1972	296.6	234.7	..	199.5	..	(e)834.7	1.8	..	1,567.4
1973	199.8	226.7	..	197.4	..	(e)1,165.5	2.0	..	1,791.4
1974	141.1	126.5	..	516.6	..	1,401.7	2.4	..	2,188.4
1975	177.5	62.6	..	633.8	..	1,693.9	2.6	..	2,570.4
1976	n.a.	n.a.	..	1,038.3	..	n.a.	3.0	..	3,005.1
RURAL CREDITS DEPARTMENT									
1972	..	..	..	..	..	260.8	..	..	260.8
1973	..	..	..	..	..	206.0	..	..	206.0
1974	..	..	..	..	..	202.2	..	..	202.2
1975	..	..	..	..	..	203.4	..	..	203.4
1976	..	..	..	..	..	181.5	..	..	181.5
TOTAL(f)									
1972	2,977.1	610.9	12.3	498.8	4.7	360.5	43.5	96.3	4,604.1
1973	3,351.9	752.4	9.7	608.4	9.4	835.8	51.6	127.6	5,746.9
1974	3,003.5	407.2	8.2	1,396.6	16.9	1,454.2	51.8	156.0	6,494.5
1975	3,154.2	183.1	8.7	1,227.7	46.9	856.5	52.6	195.0	5,724.8
1976	n.a.	n.a.	n.a.	1,856.7	n.a.	658.6	56.5	n.a.	6,370.8

(a) Includes currency at short call and International Monetary Fund drawing rights. (b) Includes Treasury bills and Treasury notes. (c) After deducting provision for debts considered bad or doubtful. (d) At cost, less amounts written off. (e) Includes interest-bearing deposit account established with the Central Bank. (f) Inter-departmental accounts have been offset.

RESERVE BANK OF AUSTRALIA: NET PROFITS
($ million)

	Central Banking Business	Note Issue Department	Rural Credits Department	Total	*Distributed to—*			
					Commonwealth of Australia	*Reserve Bank Reserve fund*	*Rural Credits Department*	
							Reserve fund	*Development fund*
1971–72	4.9	25.2	1.5	31.6	25.2	4.9	0.7	0.7
1972–73	..	..	1.3	1.3	..	..	0.6	0.6
1973–74	..	..	1.7	1.7	..	..	0.8	0.8
1974–75	..	..	2.2	2.2	..	..	1.1	1.1
1975–76	..	..	2.3	2.3	..	..	1.2	1.2

Trading banks

Balance sheet information contained in the table on page 517 and profit and loss account information contained in the table at the top of page 518 for the years 1970 to 1974 does not relate to uniform accounting periods but rather to the financial years of the banks which ended in the years shown.

Figures shown for averages of liabilities and assets in the table on page 518 are the average of liabilities and assets within Australia (including External Territories and up to 1973, Papua-New Guinea) of the banks on the weekly balance days (Wednesdays) during the period concerned. In the table on page 519 figures shown for debits to customers' accounts are the average of debits for the weeks ending on the weekly balance days (Wednesdays) during the period concerned. In the table on page 520 figures shown for new and increased lending commitments are the averages of weekly commitments for the six months ending on the second Wednesday of the last month in the period under review.

In the classification of bank advances, borrowers are classified into two main groups.

Resident borrowers comprising all institutions (including branches of overseas institutions) engaged in business in Australia and individuals permanently residing in Australia, and

Non-resident borrowers comprising all other persons and institutions, including companies incorporated abroad, which, although represented, do not carry on business in Australia.

Advances to resident borrowers are classified into.

Business advances which are advances to partnerships, companies and other institutions engaged in business in Australia, advances to individuals actively engaged in business or a profession on their own behalf if the advances are mainly for purposes of that business or profession, and advances to mutual, co-operative and benefit societies which distribute their profits to members by way of dividends, rebates of charges for goods and services, or increased benefits.

Separate figures are shown for business advances to companies and to other (unincorporated) businesses and advances are also classified to the main industry of borrower.

Advances to public authorities which are advances to local and semi-government authorities including separately constituted government business undertakings but not the Australian and State governments.

Personal advances which are advances to individuals for purposes other than carrying on a business or profession.

Advances to non-profit organisations which are advances to organisations which are not operated for the purpose of making a profit or gain to individual members, but for the purposes of the organisations or for the benefit of the community in general.

The classification used for overdraft limits is the same as that used for the classification of bank advances (*see* above) while abridged versions of this classification are used for bank deposits and new and increased lending commitments.

Interest rates

At 30 June 1976 the maximum rate of interest paid by trading banks for the following terms were: (i) on fixed deposits of less than $50,000, 3 months and less than 6 months—8.25 per cent, 6 months and less than 2 years—8.75 per cent, 2 years and less than 4 years—9.50 per cent; (ii) on fixed deposits of $50,000 and over, 30 days to 4 years—10.00 per cent (iii) on certificates of deposit ($50,000 and over), 3 months to 4 years—not subject to maximum rate. The maximum rate of interest charged on overdrafts under $100,000 was 10.50 per cent and the maximum flat rate on unsecured personal loans was 7.75 per cent.

Branches and agencies

At 30 June 1975 the major trading banks operated 4,587 branches, and the other trading banks 319 branches. Of the total of 4,906 branches, 2,534 were located in 'metropolitan areas'. Trading bank facilities were also available at 1,303 agencies throughout Australia at 30 June 1975.

Liabilities and assets

TRADING BANKS(*a*): LIABILITIES AND ASSETS(*b*)

($ million)

LIABILITIES

	Paid-up capital	*Reserve funds (used in business of bank)*	*Final dividend proposed*	*Balance of profit and loss account*	*Total share-holders' funds or total capital and reserve funds*	*Balances due to other banks*	*Deposits, bills payable and other liabilities(c)*	*Total*
1970 . .	358.6	253.7	12.6	27.3	652.1	460.5	9,295.3	10,407.9
1971 . .	326.7	273.4	13.3	30.4	643.7	690.8	10,009.0	11,343.6
1972 . .	341.5	313.2	16.0	33.5	704.1	801.1	11,981.7	13,487.0
1973 . .	376.9	388.1	19.3	35.6	819.9	798.3	15,659.9	17,278.1
1974 . .	417.4	467.6	21.7	39.0	945.7	1,296.0	17,929.1	20,170.8

ASSETS

			Australian public securities					
			Australian Government					
	Coin, bullion, notes and cash at Reserve Bank	*Money at short call overseas*	*Treasury bills and notes*	*Other securities*	*Local and semi-government authorities*	*Other public securities*	*Other securities*	*Loans to authorised dealers in short-term money market*
1970 . .	252.6	49.6	92.7	1,244.3	47.3	39.3	229.4	132.2
1971 . .	220.0	49.7	106.5	1,427.1	50.8	71.6	273.4	155.6
1972 . .	208.3	58.8	258.9	2,100.7	60.1	172.0	310.4	297.9
1973 . .	219.7	81.6	186.5	2,258.5	64.8	258.3	400.3	294.5
1974 . .	313.7	96.4	203.0	2,059.0	71.3	114.1	423.4	303.7

	Statutory reserve deposit account with Reserve Bank	*Cheques and bills of, and balances with and due from other banks*	*Loans(d), advances and bills discounted*	*Bank premises, furniture and sites*	*Bills receivable and re-mittances in transit*	*All other assets*	*Total*
1970 . .	632.0	400.4	5,707.6	199.2	1,181.7	199.7	10,407.9
1971 . .	611.6	511.3	6,179.8	178.5	1,271.8	235.9	11,343.6
1972 . .	566.4	753.2	6,866.8	199.7	1,378.8	255.0	13,487.0
1973 . .	905.1	837.9	9,612.4	217.3	1,549.2	392.0	17,278.1
1974 . .	626.4	962.8	11,611.7	248.3	2,139.8	997.2	20,170.8

(*a*) Excludes the overseas banks but includes the deposits and assets held against those deposits of the Savings Bank Division of the Rural and Industries Bank of Western Australia. (*b*) This table relates to liabilities and assets both inside and outside Australia. (*c*) Includes provisions for contingencies. (*d*) Other than loans to authorised dealers in the short-term money market.

TRADING BANKS(*a*): PROFIT AND LOSS, APPROPRIATION OF PROFITS(*b*)

($ million)

	Profit and loss				*Profits appropriated to—*			
	Net earnings (c)	*Expenses (d)*	*Income, land and other taxes and payments in lieu of taxes*	*Net profit*	*Reserve funds (e)*	*Writing-off bank premises*	*Other appropriations*	*Dividends paid and proposed*
1970	478.9	378.9	43.8	56.3	15.8	1.0	3.1	31.1
1971	525.6	443.0	36.2	46.3	12.6	1.0	3.9	25.8
1972	586.8	489.8	42.7	54.3	17.0	1.1	3.9	28.8
1973	707.6	561.8	71.5	74.4	30.8	1.1	4.9	33.6
1974	875.2	721.7	74.8	78.7	29.7	0.8	4.0	41.4

(*a*) Excludes the overseas banks. (*b*) Includes profit and loss on account of the Savings Bank Division of the Rural and Industries Bank of Western Australia. (*c*) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts) after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets and losses on realisation of assets, and transfers to the credit of contingencies accounts (out of which accounts provision for all bad and doubtful debts has been made). (*d*) Includes directors' fees. (*e*) Excludes accumulated profits and profit and loss accounts.

ALL TRADING BANKS: AVERAGE LIABILITIES AND ASSETS(*a*) WITHIN AUSTRALIA(*b*)

($ million)

LIABILITIES(*c*)

	Deposits repayable in Australia						
		Current					
June	*Fixed*	*Bearing interest*	*Not bearing interest*	*Total*	*Balances due to other banks*	*Bills payable and all other liabilities to the public*	*Total*
1972	3,742.1	538.0	4,042.0	8,322.1	372.0	559.3	9,253.4
1973	5,152.2	648.6	5,271.7	11,072.5	351.0	726.3	12,149.7
1974	6,985.9	660.1	5,068.0	12,714.0	669.2	1,196.9	14,580.0
1975	8,635.0	842.6	5,458.0	14,935.7	588.0	1,695.2	17,218.9
1976	9,775.4	930.0	6,250.9	16,956.3	602.7	2,095.3	19,654.3

ASSETS(*d*)

		Australian Government securities							
June	*Coin, bullion, notes and cash at Reserve Bank*	*Treasury bills and notes*	*Other securities*	*Local and semi-government securities*	*Loans to authorised dealers in short-term money market*	*Statutory reserve deposit account with Reserve Bank*	*Loans(e), advances and bills discounted*	*All other assets*	*Total*
1972	190.1	116.7	1,702.9	29.2	249.8	558.2	5,875.7	921.2	9,643.7
1973	213.6	189.0	2,221.0	27.6	149.6	784.7	7,856.2	1,181.2	12,622.9
1974	273.0	79.8	2,084.3	27.6	65.4	1,032.6	10,120.3	1,678.3	15,361.3
1975	299.0	1,167.8	2,358.9	31.2	167.4	421.4	11,205.0	2,322.8	17,973.5
1976	345.6	191.0	3,410.9	32.8	182.3	840.5	12,559.5	2,791.0	20,353.5

(*a*) Figures shown for average of liabilities and assets are the average of liabilities and assets within Australia of the banks at the close of business on the weekly balance days (usually Wednesdays) during the period concerned. (*b*) Includes External Territories and up to 1973 Papua New Guinea. (*c*) Excludes shareholders' funds, inter-branch accounts and contingencies. (*d*) Excludes inter-branch accounts and contingencies. (*e*) Excludes loans to authorised dealers in the short-term money market.

TRADING BANKS: AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS(a)

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971–72	2,363.0	1,808.7	459.1	293.1	318.4	70.0	18.7	41.8	5,372.8
1972–73	3,058.0	2,306.7	597.5	336.4	355.9	85.3	17.8	64.6	6,822.2
1973–74	3,397.5	2,642.5	753.4	414.6	439.4	103.0	19.3	73.9	7,843.7
1974–75	3,805.9	2,898.8	817.9	456.6	515.9	119.4	22.7	78.6	8,715.6
1975–76	4,462.1	3,808.0	1,027.4	578.0	680.0	150.2	27.8	118.1	10,851.6

(a) Covers all trading banks and in addition the Rural Credit Department of the Reserve Bank and the Commonwealth Development Bank. Excludes debits to the Australian and State Government accounts in capital cities.

Major Trading Banks: classification of bank advances, deposits, new and increased lending commitments and overdraft limits

For an explanation of items in the following table *see* notes on page 516.

CLASSIFICATION OF TOTAL ADVANCES WITHIN AUSTRALIA(a)

	At second Wednesday of—							
	July 1974		*January 1975*		*July 1975*		*January 1976*	
	Amount ($m)	*Per cent*	*Amount ($m)*	*Per cent*	*Amount ($m)*	*Per cent*	*Amount ($m)*	*Per cent*
Resident borrowers—								
Business advances—								
Agriculture, grazing and dairying	1,161.4	12.9	1,133.8	12.0	1,220.2	12.1	1,179.0	11.4
Manufacturing	1,460.1	16.2	1,559.3	16.5	1,527.9	15.1	1,459.3	14.2
Transport, storage and communication	165.2	1.8	182.1	1.9	199.3	2.0	198.1	1.9
Finance—								
Building and housing societies	78.4	0.9	68.6	0.7	51.5	0.5	51.7	0.5
Other	506.6	5.6	693.7	7.3	622.2	6.2	597.7	5.8
Total finance	585.1	6.5	762.4	8.1	673.6	6.7	649.5	6.3
Commerce—								
Retail trade	558.0	6.2	516.2	5.5	568.1	5.6	551.4	5.4
Wholesale trade(b)	653.0	7.2	650.8	6.9	577.3	5.7	636.3	6.2
Total commerce	1,211.0	13.4	1,166.9	12.4	1,145.4	11.3	1,187.7	11.5
Building and construction	344.4	3.8	348.9	3.7	364.8	3.6	345.2	3.4
Other businesses	1,615.7	17.9	1,713.9	18.2	2,009.6	20.0	2,106.5	20.5
Unclassified	86.5	1.0	191.0	2.0	254.6	2.5	182.8	1.8
Total business advances	*6,629.3*	*73.5*	*7,058.2*	*74.9*	*7,395.4*	*73.3*	*7,308.1*	*70.9*
of which—								
Companies	4,533.5	50.3	4,765.0	50.5	4,675.4	46.3	4,617.3	44.8
Other	2,095.8	23.2	2,293.3	24.4	2,719.9	27.0	2,690.8	26.1
Advances to public authorities(c)	96.2	1.0	144.6	1.5	116.7	1.2	204.4	2.0
Personal advances classified according to main purpose of advance—								
Building or purchasing own home (individuals)	629.8	7.0	620.8	6.6	614.2	6.1	629.5	6.1
Other (including personal loans)	1,554.1	17.2	1,481.3	15.7	1,834.2	18.2	2,028.9	19.7
Total personal	2,184.0	24.2	2,102.1	22.3	2,448.4	24.3	2,658.4	25.8
Advances to non-profit organisations	98.1	1.1	110.0	1.2	111.0	1.1	123.8	1.2
Total advances to resident borrowers	*9,007.6*	*99.8*	*9,415.0*	*99.8*	*10,071.5*	*99.8*	*10,294.7*	*99.9*
Advances to non-resident borrowers	*16.6*	*0.2*	*15.0*	*0.2*	*19.6*	*0.2*	*12.7*	*0.1*
Total all advances	9,024.2	100.0	9,430.0	100.0	10,091.0	100.0	10,307.4	100.0

(a) Includes External Territories. (b) Includes temporary advances to woolbuyers. (c) Includes local government and semi-government bodies.

MAJOR TRADING BANKS: CLASSIFICATION OF DEPOSITS(*a*) WITHIN AUSTRALIA(*b*)

	At second Wednesday of—							
	July 1974		*January 1975*		*July 1975*		*January 1976*	
	Amount ($m)	*Per cent*	*Amount ($m)*	*Per cent*	*Amount ($m)*	*Per cent*	*Amount ($m)*	*Per cent*
Resident depositors—								
Business deposits—								
Agriculture, grazing and dairying	1,031.8	12.2	1,253.9	11.6	1,194.3	9.6	1,535.9	10.8
Manufacturing	284.7	3.4	453.8	4.2	562.2	4.6	695.8	4.9
Transport, storage and communication	110.6	1.3	139.7	1.3	153.9	1.3	178.8	1.3
Finance	579.2	6.9	724.3	6.7	1,182.8	9.5	1,451.6	10.2
Commerce	546.1	6.5	761.4	7.0	692.4	5.6	859.4	6.0
Building and construction	220.9	2.4	321.5	3.0	317.2	2.6	407.8	2.9
Other businesses	1,219.2	14.4	1,371.4	12.7	1,620.7	13.1	1,749.4	12.3
Unclassified	122.3	1.5	146.8	1.4	164.9	1.3	170.9	1.2
Total business deposits	*4,114.8*	*48.7*	*5,172.8*	*47.8*	*5,888.3*	*47.6*	*7,049.7*	*49.4*
of which—								
Companies	1,741.2	20.6	2,266.6	21.0	2,642.7	21.4	3,208.5	22.5
Other	2,373.6	28.1	2,906.2	26.8	3,245.6	26.3	3,841.2	26.9
Deposits of public authorities	482.3	5.7	766.9	7.1	1,144.0	9.3	1,333.7	9.4
Personal deposits	3,305.5	39.2	4,244.8	39.3	4,539.4	36.7	5,047.0	35.4
Deposits of non-profit organisations	408.2	4.8	497.8	4.6	646.7	5.2	690.5	4.8
Total resident depositors	*8,310.8*	*98.4*	*10,682.2*	*98.8*	*12,218.5*	*98.9*	*14,120.8*	*99.0*
Total non-resident depositors	*133.5*	*1.6*	*131.2*	*1.2*	*139.9*	*1.1*	*143.3*	*1.0*
Total all depositors	**8,444.3**	**100.0**	**10,813.4**	**100.0**	**12,358.4**	**100.0**	**14,264.1**	**100.0**

(*a*) Excludes deposits of the Australian and State Governments. (*b*) Includes External Territories.

MAJOR TRADING BANKS: NEW AND INCREASED LENDING COMMITMENTS TO SELECTED INDUSTRIAL GROUPS(*a*)

(*Source:* Reserve Bank of Australia)

($ million)

	Six months ended second Wednesday of—							
	July 1974		*January 1975*		*July 1975*		*January 1976*	
	Aggregate	*Term loan component*	*Aggregate*	*Term loan component*	*Aggregate*	*Term loan component*	*Aggregate*	*Term loan component*
Business—								
Agriculture, grazing and dairying	(*b*)213.8	18.3	(*b*)117.4	7.3	(*b*)269.3	17.6	(*b*)219.2	13.3
Manufacturing	323.8	71.9	354.4	70.4	503.7	71.6	338.4	58.9
Finance	105.5	0.6	102.9	0.6	198.4	0.8	78.6	1.3
Commerce	241.8	19.3	209.3	6.2	347.0	15.4	305.3	19.1
Building and construction	92.1	2.5	60.9	3.5	140.3	8.4	109.2	2.9
Persons—								
Advances for building or purchase of own home (to individuals)	253.5	..	116.3	..	257.7	..	272.8	..
Other (including personal loans)	486.2	..	309.4	..	736.8	..	647.2	..
All other	384.4	34.9	368.8	72.4	630.3	68.7	660.1	78.8
Total	(*b*)2,101.0	147.5	(*b*)1,639.2	160.4	(*b*)3,083.5	182.4	(*b*)2,630.8	174.4

(*a*) Excludes commitments in respect of temporary advances to woolbuyers. (*b*) Includes Farm Development Loan approvals: July 1974, $24.1 million; January 1975, $20.1 million; July 1975, $47.3 million; January 1976, $49.8 million.

MAJOR TRADING BANKS: CLASSIFICATION OF OVERDRAFT LIMITS OUTSTANDING(*a*)

(*Source:* Reserve Bank of Australia)

($ million)

	Second Wednesday of—			
	July 1974	*January 1975*	*July 1975*	*January 1976*
Resident borrowers—				
Business overdraft limits—				
Agriculture, grazing and dairying—				
Mainly sheep grazing	301.2	294.2	315.9	319.2
Mainly wheat growing	109.3	105.4	104.5	107.5
Mainly dairying and pig raising	104.6	100.7	112.0	108.1
Other	449.9	441.9	493.7	506.7
Total agriculture, etc.	965.0	942.2	1,026.0	1,041.7
Manufacturing	1,895.9	2,037.0	2,323.4	2,413.3
Transport, storage and communication	185.5	209.6	234.3	221.3
Finance—				
Building and housing societies	121.0	151.1	127.4	131.6
Pastoral finance companies	111.5	105.9	108.4	103.8
Hire purchase and other finance companies	273.5	277.2	272.2	272.6
Other	273.9	262.4	358.4	359.1
Total finance	779.9	796.5	866.4	867.2
Commerce—				
Retail trade	726.3	736.5	824.9	859.3
Wholesale trade	663.7	725.5	816.4	833.7
Total commerce	1,390.0	1,462.0	1,641.2	1,693.0
Building and construction	456.3	452.1	507.4	515.5
Other business—				
Mining	261.8	292.5	293.5	323.5
Other	1,400.8	1,412.8	1,596.2	1,728.8
Total other business	1,662.6	1,705.3	1,889.7	2,052.3
Unclassified	116.7	111.6	137.4	154.9
Total business overdraft limits	*7,451.8*	*7,716.3*	*8,625.8*	*8,959.1*
Overdraft limits of public authorities	295.0	319.7	336.2	472.1
Personal overdraft limits—				
Building or purchasing own home	762.3	715.6	724.3	746.7
Other	1,747.8	1,675.2	2,071.2	2,254.4
Total personal overdraft limits	2,510.1	2,390.8	2,795.5	3,001.1
Overdraft limits of non-profit organisations	166.2	178.4	191.8	201.0
Total overdraft limits of resident borrowers	*10,423.1*	*10,605.2*	*11,949.4*	*12,633.3*
Overdraft limits of non-resident borrowers	*16.3*	*17.9*	*19.0*	*13.0*
Total all overdraft limits	**10,439.4**	**10,623.1**	**11,968.4**	**12,646.2**

(*a*) Excludes limits in respect of temporary advances to woolbuyers, term loans and farm development loans.

MAJOR TRADING BANKS: ADVANCES(*a*), BY RATE OF INTEREST
(*Source:* Reserve Bank of Australia)
(Proportion at each rate to total—per cent)

Interest rate per annum	*At about end of—* *June 1974*	 *December 1974*	 *June 1975*	 *December 1975*
6.5 per cent and less	3.2	3.7	3.9	4.1
More than 6.5 per cent, but less than 7.0 per cent	0.3	0.1	0.3	0.3
7.0 per cent	0.2	0.1	0.2	0.2
More than 7.0 per cent, but less than 7.5 per cent	0.8	0.3	0.3	0.5
7.5 per cent	0.8	0.5	0.6	3.1
More than 7.5 per cent, but less than 8.0 per cent	0.5	0.4	0.7	2.2
8.0 per cent	1.3	0.4	0.7	2.4
More than 8.0 per cent, but less than 8.5 per cent	0.7	0.3	0.6	1.2
8.5 per cent	0.9	0.6	0.6	0.6
More than 8.5 per cent, but less than 9.0 per cent	1.3	0.4	3.4	0.5
9.0 per cent	4.6	1.1	1.6	0.3
More than 9.0 per cent, but less than 9.5 per cent	2.1	1.1	3.2	0.4
9.5 per cent	28.5	1.0	1.2	0.6
More than 9.5 per cent, but less than 10.0 per cent	0.7	2.1	0.9	1.4
10.0 per cent	0.9	1.6	0.8	1.2
More than 10.0 per cent, but less than 10.5 per cent	0.7	2.4	1.2	1.4
10.5 per cent	0.7	0.9	1.0	0.8
More than 10.5 per cent, but less than 11.0 per cent	0.6	2.1	2.2	1.1
11.0 per cent	8.7	3.3	17.6	10.7
More than 11.0 per cent, but less than 11.5 per cent	1.9	1.7	4.7	9.7
11.5 per cent	11.1	37.0	19.6	22.1
More than 11.5 per cent, but less than 12.0 per cent	0.9	0.7	0.5	0.5
12.0 per cent	11.2	11.4	8.7	8.8
More than 12.0 per cent, but less than 12.5 per cent	2.9	2.4	2.1	1.6
12.5 per cent	4.0	5.7	6.3	6.9
More than 12.5 per cent, but less than 13.0 per cent	0.7	0.8	0.8	0.9
13.0 per cent	2.1	5.0	4.5	5.2
More than 13.0 per cent, but less than 13.5 per cent	1.1	0.9	1.0	0.9
13.5 per cent	1.0	3.6	5.1	5.4
More than 13.5 per cent, but less than 14.0 per cent	1.0	1.3	1.5	1.4
14.0 per cent	1.1	2.0	1.0	0.8
More than 14.0 per cent, but less than 14.5 per cent	0.2	0.4	0.2	0.1
14.5 per cent	0.6	1.0	1.0	0.6
More than 14.5 per cent, but less than 15.0 per cent	0.1	0.2	0.1	0.3
15.0 per cent	2.1	3.9	0.8	0.6
More than 15.0 per cent	..	..	..	1.1
Total	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Excludes term loans, farm development loans and personal instalment loans. Comprises categories of loans specifically exempted from the prescribed maximum overdraft requirement such as, short-term mortgage and bridging loans and post-shipment wool advances subject to a disincentive rate of interest.

MAJOR TRADING BANKS: FIXED DEPOSITS(*a*), BY RATE OF INTEREST
(*Source:* Reserve Bank of Australia)
(Proportion at each rate to total—per cent)

Interest rate per annum	*At about end of—* *June 1974*	 *December 1974*	 *June 1975*	 *December 1975*
Less than 5.5 per cent	10.8	2.7	0.5	0.1
5.5 per cent and less than 6.0 per cent	9.0	5.3	3.4	2.6
6.0 per cent and less than 6.5 per cent	4.9	2.1	1.4	1.2
6.5 per cent and less than 7.0 per cent	25.4	10.1	4.9	1.8
7.0 per cent and less than 7.5 per cent	7.6	2.4	1.3	9.8
7.5 per cent and less than 8.0 per cent	20.0	13.0	4.8	10.4
8.0 per cent and less than 8.5 per cent	22.4	2.3	9.8	18.3
8.5 per cent and less than 9.0 per cent	..	0.9	19.0	18.5
9.0 per cent and less than 9.5 per cent	..	15.2	21.8	16.1
9.5 per cent and less than 10.0 per cent	..	28.1	30.7	19.8
10.0 per cent	..	18.0	2.4	1.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Excludes Government fixed deposits and certificates of deposit.

Savings banks

For information on the origin of savings banks in Australia, *see* Year Book No. 50, page 854, and earlier issues.

All savings banks, including trustee savings banks, but not State savings banks, are subject to the *Banking Act* 1959. Details of this Act and the special provisions applying to savings banks are given in Year Book No. 46, pages 759–60.

In the tables on pages 523–4 balance sheet and profit and loss account information does not relate to a uniform accounting period but rather to the financial years of the banks which ended in the years shown.

The number of operative accounts excludes school bank accounts and small inoperative accounts. The other sections of the tables relating to depositors' balances, etc., include school bank accounts, small inoperative accounts, investment accounts, deposit stock and non-interest bearing cheque accounts at the State Savings Bank of Victoria and the Savings Bank of South Australia, and fixed deposit accounts and non-interest bearing cheque accounts at the trustee savings banks in Tasmania.

At 30 June 1975 all savings banks were paying interest on deposits at rates of up to 6.25 per cent. For accounts other than friendly and other societies the maximum interest bearing amount in any one account was $20,000. There is no limit on the maximum interest bearing amount for society cheque accounts. Interest rates charged on loans made by the savings banks were: housing loans—up to 10.00 per cent; other loans (under $50,000)—11.50 per cent.

At 30 June 1975 savings banks operated 5,537 branches, 2,971 of these being in the 'metropolitan' areas. Savings bank facilities were also available at 14,224 agencies throughout Australia.

SAVINGS BANKS(*a*): LIABILITIES AND ASSETS(*b*)

($ million)

LIABILITIES

	Paid-up capital	*Reserve funds (used in the business of the bank)*	*Balance of profit and loss account*	*Total share-holders' funds*	*Deposi-tors' balances*	*Balances due to other banks*	*Bills payable and all other liabilities (c)*	*Total*
1970 . .	31.0	137.4	7.3	175.7	7,161.2	14.2	236.6	7,587.7
1971 . .	31.0	149.8	8.4	189.2	7,722.0	16.8	258.9	8,186.9
1972 . .	31.5	171.0	8.9	211.4	8,547.1	19.2	293.9	9,071.7
1973 . .	36.5	191.1	9.4	237.1	10,398.4	25.3	343.6	11,004.4
1974 . .	40.5	207.3	9.7	257.5	11,101.0	35.9	395.6	11,789.9

ASSETS

			Australian public securities			
			Australian Government and States			
	Coin, bullion, notes and deposits with Reserve Bank	*Deposits in Australia with trading banks*	*Treasury bills and notes*	*Other securities*	*Local and semi-government authorities*	*Other securities*
1970 . .	585.1	150.8	74.7	2,232.6	1,791.9	16.5
1971 . .	659.8	123.1	58.6	2,287.5	1,963.0	28.7
1972 . .	906.1	188.6	39.3	2,352.5	2,171.4	36.9
1973 . .	1,356.8	233.5	104.1	2,744.4	2,511.2	40.2
1974 . .	1,059.0	281.3	47.8	2,850.4	2,791.6	24.8

	Loans to authorised dealers in short-term money market	*Cheques and bills of, and balances with and due from other banks(d)*	*Loans(e), advances and bills discounted*	*Bank premises, furniture and sites*	*Bills receivable and re-mittances in transit*	*All other assets*	*Total*
1970 . .	54.1	167.8	2,337.3	98.2	0.4	78.3	7,587.7
1971 . .	78.6	195.0	2,602.9	102.6	0.3	86.9	8,186.9
1972 . .	55.9	212.7	2,897.7	111.5	0.1	99.0	9,071.7
1973 . .	103.6	228.4	3,433.1	119.7	. .	129.4	11,004.4
1974 . .	69.7	245.4	4,138.1	135.5	. .	146.2	11,789.9

(*a*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*b*) This table relates to liabilities and assets both inside and outside Australia. (*c*) Includes provisions for contingencies. (*d*) Includes deposits with and loans to specified lenders other than trading banks. (*e*) Other than loans to dealers in the short-term money market.

SAVINGS BANKS(*a*): PROFIT AND LOSS, APPROPRIATION OF PROFITS AND DIVIDENDS

($ million)

	Profit and loss				*Profits appropriated to—*			
	Net earnings (b)	*Ex-penses (c)*	*Income, land and other taxes and pay-ments in lieu of taxes*	*Net profit*	*Reserve funds*	*Writing-off bank premises*	*Other appro-priations*	*Dividends paid and proposed*
1970 . .	149.6	121.4	9.6	18.6	9.9	1.9	3.0	3.2
1971 . .	179.4	141.2	11.4	26.7	13.4	1.9	6.3	4.1
1972 . .	213.9	165.4	14.2	34.4	19.9	2.8	7.5	5.7
1973 . .	268.5	209.3	17.9	41.4	23.3	2.9	8.4	6.2
1974 . .	321.5	268.4	19.5	33.7	17.7	2.1	6.9	6.7

(*a*) Excludes Savings Bank Division of the Rural and Industries Bank of Western Australia. (*b*) Discount and interest earned, net exchange, commissions and other items (including transfers from contingencies accounts), after deducting interest paid and accrued on deposits, rebate on bills current at balance date, amounts written off assets, and losses on realisation of assets and transfers to the credit of contingencies accounts (out of which accounts provisions for all bad and doubtful debts have been made). (*c*) Includes directors' fees.

SAVINGS BANKS: BUSINESS TRANSACTED IN AUSTRALIA

	Number of operative accounts	*Deposits (a)*	*With-drawals (a)*	*Interest added*	*Depositors' balances at end of year*
	'000	$m	$m	$m	$m
1971–72 . .	16,726	14,304.3	13,823.0	275.6	8,391.4
1972–73 . .	17,468	18,092.3	16,561.6	315.8	10,237.9
1973–74 . .	18,369	23,202.4	22,648.7	404.0	11,195.6
1974–75 . .	19,390	30,455.9	29,374.9	513.9	(*b*)12,868.5
1975–76 . .	21,807	36,361.6	35,021.0	613.4	14,822.5

(*a*) Includes inter-branch transfers. (*b*) Data from June 1975 have been revised to reflect a change in accounting procedures by one bank.

SCHOOLS SAVINGS BANKS: AUSTRALIA

End of June—	*Number of school agencies*	*Number of operative accounts*	*Depositors' balances*
		'000	$'000
1971	10,923	1,598	28,808
1972	10,874	1,615	26,700
1973	10,838	1,617	28,419
1974	11,131	1,602	33,765
1975	10,698	1,622	31,383

SAVINGS BANKS: HOUSING FINANCE TRANSACTIONS WITHIN AUSTRALIA

	Housing loans approved to—						
	Individuals						
	Dwellings not previously occupied		*Dwellings previously occupied*		*Alterations and additions*	*Total*	*Building societies*
	Number(a) '000	*$m(b)*	*Number(a)* '000	*$m(b)*	*$m*	*$m*	*$m*
1970–71 . .	27.7	237.9	40.5	320.3	9.0	567.2	16.6
1971–72 . .	28.5	262.7	45.1	394.0	13.9	670.5	17.1
1972–73 . .	36.4	400.4	63.4	676.2	27.7	1,104.3	24.7
1973–74 . .	32.7	420.2	57.3	717.6	29.5	1,167.2	20.7
1974–75 . .	31.9	512.9	78.3	1,210.5	44.6	1,768.1	24.4

	Housing loans approved to individuals—			*Balances outstanding on housing loans to—*		*Interest debited to loan accounts of individuals*
	Cancellation of loans previously approved(c)		*Undrawn commitments at end of year*	*Individuals*	*Building societies*	
	Number(a) '000	*$m(b)*	*$m*	*$m(d)*	*$m*	*$m*
1970–71 . .	4.1	32.2	129.0	2,124.9	238.6	130.1
1971–72 . .	4.2	35.3	161.0	2,392.0	227.6	144.0
1972–73 . .	5.6	57.3	348.9	2,825.3	215.9	174.1
1973–74 . .	6.4	75.2	306.9	3,460.8	212.1	227.2
1974–75 . .	8.8	126.7	467.6	4,502.3	215.1	352.7

(*a*) Number of dwelling units for which first mortgage loans approved. (*b*) Includes second mortgage finance to complete original purchase or construction. (*c*) Includes amounts cancelled as a result of periodic examinations by banks of undrawn commitments. (*d*) Includes interest debited to loan accounts.

BANKING: AUSTRALIA

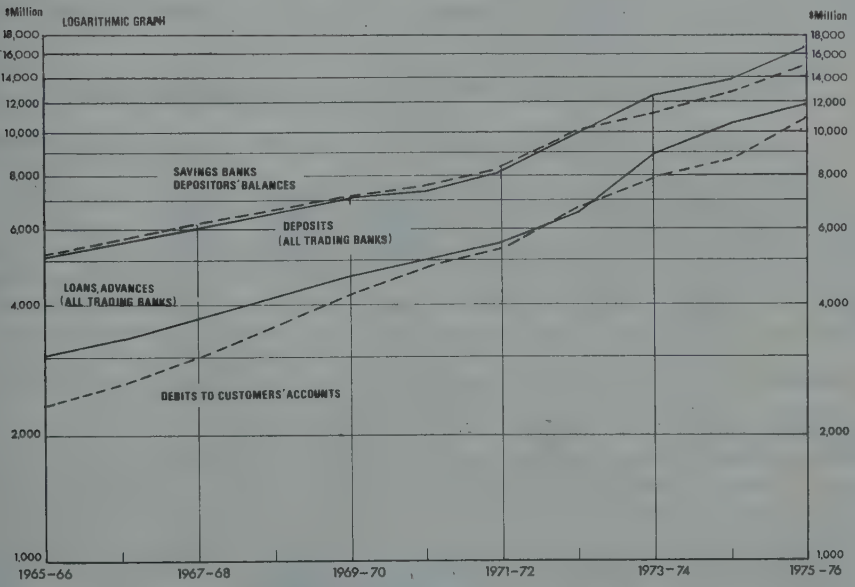


PLATE 40

Development banks

Commonwealth Development Bank of Australia

The Commonwealth Development Bank of Australia was established by the *Commonwealth Banks Act* 1959 and commenced operations on 14 January 1960. It was formed basically from an amalgamation of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank. Under the Act the Bank is authorised to provide assistance for the development of worthwhile enterprises in the fields of primary and secondary industries, which would otherwise be unable to obtain the necessary finance on reasonable and suitable terms and conditions. The Commonwealth Development Bank is managed by a General Manager under the Managing Director of the Commonwealth Banking Corporation and its policy is determined by the Board of that Corporation. The capital of the Development Bank consists of the capital of the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank immediately prior to 14 January 1960, $10 million provided by the Reserve Bank, $20 million appropriated from the Consolidated Revenue Fund in 1961–62 by the *Commonwealth Banks Act* 1961 and the *Commonwealth Banks Act* 1962, $10 million appropriated in 1963–64 by the *Commonwealth Banks Act* 1963, and such other sums as are provided from the Commonwealth Development Bank Reserve Fund. The net profits of the Bank are paid to the Commonwealth Development Bank Reserve Fund, which at 30 June 1975 stood at $38.1 million. Net profits in 1973–74 and 1974–75 amounted to $1.6 million and $2.5 million respectively.

COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: LIABILITIES
($ million)

30 June—	*Capital*	*Reserve fund*	*Balances due to other banks*	*Deposits, bills payable, all other liabilities*	*Total*
1971 . . .	61.7	31.0	157.7	32.3	282.7
1972 . . .	61.7	32.5	159.8	42.0	296.0
1973 . . .	61.7	34.0	159.1	44.2	299.1
1974 . . .	61.7	35.6	158.4	62.2	317.9
1975 . . .	61.7	38.1	163.5	84.0	347.3

COMMONWEALTH DEVELOPMENT BANK OF AUSTRALIA: ASSETS
($ million)

30 June—	*Coin, bullion, notes and cash at bankers*	*Australian public securities (incl. Treasury bills)*	*Other securities*	*Loans to authorised dealers in short-term money market*	*Cheques and bills of other banks*	*Loans, advances, and bills discounted*	*All other assets*	*Total*
1971 . .	0.8	0.7	0.2	..	1.9	277.8	1.2	282.7
1972 . .	0.9	0.5	..	0.8	2.3	290.4	1.0	296.0
1973 . .	0.6	2.0	..	1.2	2.7	291.5	1.1	299.1
1974 . .	1.9	2.0	..	3.0	9.3	300.1	1.6	317.9
1975 . .	2.8	3.0	..	1.0	4.1	334.0	2.4	347.3

Australian Resources Development Bank Limited

The Australian Resources Development Bank Limited was established in 1967 with equity capital of $3 million subscribed by the major trading banks. It was given the status of a bank by the *Banking Act* 1967 and opened for business on 29 March 1968. The main object of the Australian Resources Development Bank is to assist Australian enterprises to participate more fully in the development of Australia's natural resources. It provides finance to enterprises engaged in major developmental projects by direct loans, investing in equity capital or by refinancing loans made by trading banks acting individually or as a group. The Australian Resources Development Bank obtains funds by accepting deposits and by borrowing on the Australian and overseas capital markets.

AUSTRALIAN RESOURCES DEVELOPMENT BANK LIMITED: LIABILITIES
($ million)

30 September—	*Capital*	*Reserve fund*	*Balances due to other banks*	*Deposits, bills payable, all other liabilities*	*Total*
1972 . . .	3.0	2.8	53.8	304.4	364.0
1973 . . .	3.0	4.0	49.5	283.8	340.3
1974 . . .	3.0	5.0	86.8	310.3	405.1
1975 . . .	7.0	2.3	57.8	443.3	510.4

AUSTRALIAN RESOURCES DEVELOPMENT BANK LIMITED: ASSETS
($ million)

30 September—	*Coin, bullion, notes and cash at bankers*	*Australian public securities (incl. Treasury bills)*	*Other securities*	*Loans to authorised dealers in short-term money market*	*Cheques and bills of other banks*	*Loans, advances, and bills discounted*	*All other assets*	*Total*
1972 . .	..	0.2	0.3	10.0	326.5	15.5	11.5	364.0
1973 . .	..	0.1	0.3	12.2	305.2	12.1	10.3	340.3
1974 . .	0.2	0.2	0.3	13.1	357.0	31.8	2.6	405.1
1975 . .	..	6.7	0.3	27.8	380.5	90.6	4.6	510.4

INSURANCE

Legislation

Section 51 of the Commonwealth Constitution confers the necessary powers on the Australian Parliament to legislate with respect to ‘insurance other than State insurance; also State insurance extending beyond the limits of the State concerned’. Commonwealth legislation includes the *Marine Insurance Act* 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., the *Insurance* (*Deposits*) *Act* 1932 requiring the lodgment of deposits by insurance companies, and the *Life Insurance Act* 1945 generally regulating life insurance business in Australia. The *Marine Insurance Act* 1909 and the *Insurance* (*Deposits*) *Act* 1932 have limited application, and except for life insurance business, which is regulated by the *Life Insurance Act* 1945, insurance business is conducted almost entirely under State laws.

Insurance (Deposits) Act 1932

Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to lodge a deposit with the Commonwealth Government Treasurer. Money deposited is invested by the Treasurer in prescribed securities selected by the depositor and all interest is paid to depositors. Deposits remain as security against liability to policy holders and are available to satisfy judgments obtained in respect of policies. Deposits held by States on 1 February 1932 could, however, remain with the States subject to the conditions embodied in the laws of the States, and depositors to the extent of the value of these deposits were exempt from liability to make deposits under the Commonwealth Act.

The following are not regarded as insurance business under the Act: staff superannuation schemes; schemes of religious organisations solely for insurance of their property; friendly society, union and association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned, and under the *Life Insurance Act* 1945 ceased to apply to life insurance business.

Life Insurance Act 1945

The objects of this Act are: (*a*) to replace all State legislation on the subject of life insurance, except that relating to the life insurance operations of State Government insurance offices within the State concerned, and to provide uniform legislation for the whole of Australia; (*b*) to appoint an Insurance Commissioner to exercise active supervision of the activities of life insurance companies, with a view to securing the greatest possible protection for policy holders; (*c*) to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency. The Act came into operation on 20 June 1946. A summary of the provisions of the Act is given in Year Book No. 37, pages 595–7. The Insurance Commissioner issues an annual report which contains detailed information on the operations of life insurance companies.

Life insurance

Since 1947, returns lodged under the *Life Insurance Act* 1945 have been used to compile life insurance statistics. The statistics included in the following tables relate to the Australian and overseas business of companies with head offices in Australia together with the Australian business of companies with head offices overseas. The information shown has been compiled from returns of life insurance business submitted in the financial years which ended during the year stated.

Summary information on foreign ownership and control of life insurance business is shown in Chapter 11. More detailed statistics are available in *Foreign Ownership and Control of Life Insurance Business* (*Advance Release*), 1973 (5.49) and *Foreign Ownership and Control of Life Insurance Business* 1973 (5.53).

Offices transacting business

The number of companies which transacted life insurance business in Australia during 1974 was 51. Of these, 37 were companies incorporated outside Australia or were subsidiaries of such companies. Nine companies, including 4 incorporated outside Australia, were mutual companies. All companies conducted ordinary business and 46 conducted superannuation business. Industrial business was conducted by 10 companies, all of which also conducted superannuation business. In addition two State Government institutions conduct life insurance business only in their own State.

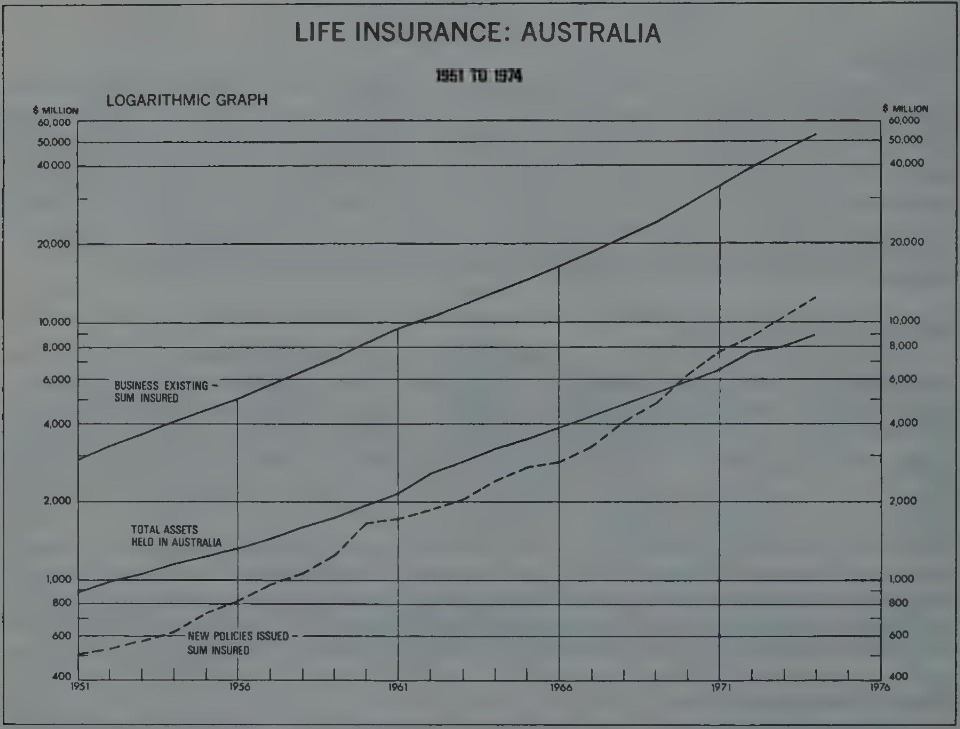


PLATE 41

LIFE INSURANCE: SUMMARY, AUSTRALIA

	Insurance and endowment policies			*Annuity policies*	
	Number of policies	*Sum insured ($ million)*	*Annual premiums ($ million)*	*Number of policies*	*Annuities per annum ($ million)*
ORDINARY BUSINESS					
New policies issued—					
1970	504,613	3,777.9	75.3	55	0.1
1971	569,370	4,882.6	91.5	66	0.1
1972	575,650	5,545.2	100.4	74	0.1
1973	552,422	6,504.8	96.6	78	0.1
1974	508,904	6,899.9	94.4	26	0.1
Policies discontinued or reduced(*a*)—					
1970	273,765	1,153.2	24.5	204	0.1
1971	293,710	1,398.9	28.3	109	..
1972	324,374	1,777.0	34.0	91	0.1
1973	197,401	2,016.9	34.0	157	0.1
1974	424,767	2,613.7	50.0	173	0.1
Policies existing at end of—					
1970	4,907,012	19,430.8	462.6	1,951	1.1
1971	5,182,672	22,914.5	525.7	1,906	1.1
1972	5,433,950	26,682.7	592.2	1,889	1.2
1973	5,788,971	31,170.6	654.7	1,811	1.2
1974	5,873,108	35,456.8	699.2	1,664	1.2
INDUSTRIAL BUSINESS					
New policies issued					
1970	138,647	198.5	7.3	..	..
1971	135,384	231.4	8.0	..	..
1972	133,700	255.3	8.7	..	..
1973	123,239	263.0	8.9	..	..
1974	85,675	216.4	7.1	..	..
Policies discontinued or reduced(*a*)—					
1970	168,600	100.6	4.1	..	..
1971	165,067	115.0	4.5	..	..
1972	215,164	142.4	5.3	..	..
1973	193,159	153.7	5.2	..	..
1974	230,794	187.1	7.2	..	..
Policies existing at end of—					
1970	2,500,433	1,212.3	48.3	..	..
1971	2,470,750	1,328.7	51.8	..	..
1972	2,389,286	1,441.5	55.2	..	..
1973	2,319,366	1,550.9	58.9	..	..
1974	2,174,247	1,580.1	58.9	..	..
SUPERANNUATION BUSINESS					
New policies issued—					
1970	74,334	2,298.6	58.8	60	10.6
1971	78,005	2,785.3	72.4	45	12.9
1972	86,394	3,015.2	78.8	59	14.6
1973	72,424	3,768.6	94.1	42	14.3
1974	89,778	5,534.7	139.2	38	17.4
Policies discontinued or reduced(*a*)—					
1970	126,552	940.0	26.5	33	4.5
1971	87,206	1,077.6	29.4	28	4.7
1972	67,696	1,324.0	32.9	43	7.1
1973	113,043	1,759.4	42.4	3	9.1
1974	94,932	1,948.8	48.8	60	14.0
Policies existing at end of—					
1970	699,652	7,797.8	211.5	977	31.4
1971	690,451	9,505.6	254.5	980	39.6
1972	709,151	11,196.7	300.5	996	47.0
1973	668,540	13,205.9	352.1	1,035	52.3
1974	663,386	16,791.8	442.4	1,013	55.7

(*a*) Includes policies matured, surrendered, forfeited, transferred to overseas registers, converted to other classes of business, etc.

LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED IN AUSTRALIA BY CAUSE OF DISCONTINUANCE OR REDUCTION(*a*)(*b*)

	Events provided for in policy							
	Death	*Maturity*	*Other (including expiry)*	*Surrender*	*Forfeiture*	*Transfer*	*Other causes*	*Total*
ORDINARY BUSINESS								
Number of policies—								
1970	23,047	73,132	4,241	121,917	65,380	−1,786	−12,166	273,765
1971	23,138	75,516	4,654	128,879	68,741	−1,442	−5,776	293,710
1972	23,630	79,430	4,947	145,473	73,395	−1,826	−677	324,372
1973	23,826	59,754	7,532	110,141	70,929	−3,061	−71,720	197,401
1974	25,000	88,654	27,062	209,689	85,023	−3,551	−7,110	424,767
Sum insured ($'000)—								
1970	54,235	63,201	158,407	506,645	394,872	−8,346	−15,845	1,153,169
1971	56,558	63,027	203,058	689,277	428,750	−14,094	−27,666	1,398,911
1972	61,660	72,536	245,464	892,028	540,624	−19,946	−15,377	1,776,989
1973	74,182	53,605	316,347	1,048,190	623,713	−30,199	−68,897	2,016,941
1974	81,646	101,798	371,087	1,332,588	769,181	−28,506	−14,076	2,613,718
INDUSTRIAL BUSINESS								
Number of policies—								
1970	12,554	69,069	−1	52,432	34,610	40	−104	168,600
1971	13,745	65,575	..	50,901	34,879	−26	−7	165,067
1972	12,267	112,636	..	51,941	38,281	51	−12	215,164
1973	11,941	126,992	..	46,770	35,448	135	−28,127	193,159
1974	12,501	120,791	..	55,561	41,901	79	−39	230,794
Sum insured ($'000)—								
1970	3,152	11,236	..	34,841	51,316	54	18	100,617
1971	3,673	12,194	60	37,199	61,751	141	21	115,042
1972	3,360	19,611	113	42,777	76,231	302	..	142,393
1973	3,793	23,344	156	44,157	82,114	177	−41	153,699
1974	4,173	23,012	206	66,488	93,660	182	−590	187,130
SUPERANNUATION BUSINESS								
Number of policies—								
1970	3,661	9,193	181	53,065	1,655	5	58,792	126,552
1971	3,712	8,938	632	44,651	1,535	−9	27,749	87,208
1972	3,854	8,992	188	33,144	1,596	5	19,915	67,696
1973	3,166	9,442	587	58,705	1,802	−1,378	40,719	113,043
1974	3,182	9,276	671	40,836	2,709	−114	38,372	94,932
Sum insured ($'000)—								
1970	23,053	23,573	72,008	605,648	21,848	−1,063	194,976	940,043
1971	24,467	28,825	143,413	679,481	23,869	−266	177,774	1,077,563
1972	29,182	36,821	152,457	813,044	22,424	248	269,850	1,324,025
1973	34,226	42,261	333,072	1,115,828	27,426	661	205,901	1,759,376
1974	38,735	57,470	278,476	1,362,110	56,989	−2,942	157,932	1,948,770

(*a*) Excludes annuities. (*b*) *See* footnote (*a*) on page 529.

Minus sign (−) denotes an increase in existing business due to an excess of transfers from overseas registers to Australian registers, or conversions from other classes of business over discontinuances.

LIFE INSURANCE: REVENUE FROM PREMIUMS, AUSTRALIA
($'000)

	Ordinary business		*Industrial business*	*Superannuation business*		
	Insurance and endowment premiums	*Consideration for annuities*	*Insurance and endowment premiums*	*Insurance and endowment premiums*	*Consideration for annuities*	*Total, all business combined*
1970	472,120	675	45,987	222,995	11,967	753,745
1971	545,217	620	49,200	259,208	13,259	867,503
1972	613,910	1,005	52,518	307,797	26,359	1,001,589
1973	675,765	931	56,483	354,223	18,892	1,106,293
1974	712,387	236	58,776	436,023	20,165	1,227,588

LIFE INSURANCE: PAYMENTS TO POLICY-HOLDERS, AUSTRALIA
($'000)

	Claims	*Surrenders*	*Annuities*	*Cash bonuses*	*Total*
ORDINARY BUSINESS					
1970	159,357	67,028	994	1,487	228,867
1971	180,923	81,511	995	1,607	265,035
1972	197,653	97,720	1,110	1,720	298,204
1973	222,646	110,169	1,141	2,136	336,092
1974	248,421	176,669	1,244	2,941	429,275
INDUSTRIAL BUSINESS					
1970	17,499	6,953	..	..	24,453
1971	19,102	7,561	..	..	26,662
1972	30,901	8,304	..	..	39,205
1973	35,537	8,301	..	..	43,839
1974	36,610	11,469	..	..	48,079
SUPERANNUATION BUSINESS					
1970	57,665	55,199	3,077	998	116,941
1971	66,589	62,848	4,012	1,109	134,557
1972	80,336	68,656	5,196	1,589	155,775
1973	93,408	83,655	2,127	1,680	180,870
1974	122,403	109,242	2,302	1,906	235,853

LIFE INSURANCE: TOTAL REVENUE
($'000)

	Australia and overseas				*Total revenue*	
	Insurance and endowment premiums	*Consideration for annuities granted*	*Net interest dividends and rents*	*All other revenue*	*Australia*	*Overseas*
ORDINARY BUSINESS						
1970	610,678	10,299	279,643	50,724	719,140	232,204
1971	695,185	11,860	315,409	58,467	828,437	252,485
1972	771,364	12,596	347,559	88,294	940,024	279,789
1973	844,561	11,471	355,295	74,916	999,401	286,842
1974	917,604	5,261	395,928	103,901	1,094,367	328,327
INDUSTRIAL BUSINESS						
1970	50,377	..	26,701	1,335	71,325	7,087
1971	53,770	..	27,904	2,739	77,024	7,390
1972	57,142	..	29,955	3,921	83,428	7,589
1973	61,298	..	28,566	3,940	85,848	7,956
1974	63,615	..	29,488	4,179	89,204	8,078
SUPERANNUATION BUSINESS						
1970	233,518	13,825	83,331	28,026	339,175	19,525
1971	271,748	16,389	94,313	38,179	399,178	21,449
1972	322,831	30,945	109,191	95,283	531,934	26,315
1973	369,764	25,674	128,452	67,053	560,829	30,112
1974	453,104	28,455	153,652	64,088	665,167	34,132

LIFE INSURANCE: TOTAL EXPENDITURE
($'000)

	Australia and overseas						*Total expenditure*	
	Claims and annuities paid	*Surrenders*	*Cash bonuses paid to policy-holders*	*Commission*	*Other expenses of management*	*All other expenditure*	*Australia*	*Overseas*
ORDINARY BUSINESS								
1970	228,462	88,708	2,464	68,885	81,526	19,671	360,745	128,971
1971	252,679	105,049	2,616	84,356	97,670	26,016	428,482	139,902
1972	268,354	123,128	2,647	94,221	111,051	36,767	484,573	151,596
1973	296,831	137,539	3,263	102,101	128,158	51,154	565,414	153,632
1974	331,487	210,255	6,421	111,142	160,196	165,645	787,605	197,540
INDUSTRIAL BUSINESS								
1970	20,104	7,620	..	7,557	9,268	1,474	41,099	4,926
1971	21,635	8,224	..	8,620	10,967	2,038	46,262	5,222
1972	35,136	9,037	..	9,295	11,799	2,614	60,083	7,800
1973	40,355	8,965	..	9,561	12,833	3,469	67,530	7,652
1974	40,910	12,419	..	8,474	14,279	18,738	87,394	7,426
SUPERANNUATION BUSINESS								
1970	64,936	58,608	1,069	8,019	18,710	53,733	192,669	12,406
1971	75,329	66,839	1,187	9,329	21,875	60,158	222,771	11,947
1972	90,539	72,850	1,651	10,250	24,438	64,997	252,413	12,310
1973	101,782	89,643	1,709	11,904	28,840	155,579	374,066	15,391
1974	132,349	115,034	2,321	16,769	40,725	172,900	461,577	18,520

LIFE INSURANCE: LIABILITIES, AUSTRALIA AND OVERSEAS, 1974

($ million)

	Life insurance business	*Other classes of business*	*Total liabilities*
Shareholders' capital—			
Authorised	..	95.8	95.8
Less un-issued	..	58.3	58.3
Subscribed capital	..	37.5	37.5
Paid-up—			
In money	..	27.2	27.2
Otherwise than in money	..	9.5	9.5
Total paid-up capital	..	36.7	36.7
Life insurance statutory funds—			
Ordinary business	7,052.9	..	7,052.9
Industrial business	547.9	..	547.9
Superannuation business	2,292.7	..	2,292.7
Total statutory funds	9,893.4	..	9,893.4
Funds in respect of other classes of business	..	51.5	51.5
General reserves	131.7	46.0	177.7
Profit and loss account balance	..	12.8	12.8
Total shareholders' capital, insurance funds and reserves	*10,025.1*	*147.1*	*10,172.2*
Other liabilities—			
Deposits	56.6	11.3	67.9
Staff provident and superannuation funds	0.9	3.1	4.0
Claims admitted or intimated but not paid	110.3	63.2	173.5
Premiums paid in advance and in suspense	7.9	..	7.9
Sundry creditors	59.8	5.6	65.4
Bank overdraft	46.3	1.8	48.1
Reserves and provisions for taxation	139.4	3.7	143.1
All other liabilities	55.7	30.4	86.1
Grand total	**10,502.0**	**266.3**	**10,768.3**

LIFE INSURANCE(*a*): ASSETS HELD IN AUSTRALIA

($ million)

	1970	*1971*	*1972*	*1973*	*1974*
Freehold and leasehold property	761.6	948.3	1,164.7	1,384.7	1,663.2
Government and municipal securities	1,819.3	2,052.5	2,329.5	2,478.5	2,666.6
Other investments	1,578.4	1,727.8	1,961.7	2,199.4	2,285.1
Loans on mortgage	1,235.4	1,252.9	1,271.5	1,258.4	1,338.8
Loans on companies' policies	223.0	251.8	267.8	266.5	283.2
Other loans	57.1	60.3	62.3	74.6	90.5
All other assets	236.3	270.3	311.4	354.4	450.2
Total	**5,911.1**	**6,563.8**	**7,369.0**	**8,016.7**	**8,778.0**

(*a*) Includes other classes of business.

LIFE INSURANCE: ASSETS, AUSTRALIA AND OVERSEAS, 1974

($'000)

	Australia			*Australia and overseas*		
	Life insurance business	*Other classes of business*	*Total*	*Life insurance business*	*Other classes of business*	*Total*
Fixed assets—						
Freehold and leasehold property, office premises	1,655.8	7.3	1,663.2	1,968.7	7.3	1,976.0
Furniture, etc.	15.4	1.8	17.1	18.5	1.8	20.2
Total fixed assets	*1,671.2*	*9.1*	*1,680.3*	*1,987.1*	*9.1*	*1,996.2*
Loans—						
On mortgage	1,316.1	22.6	1,338.8	1,776.8	22.6	1,799.5
On policies of the company	283.2	..	283.2	363.3	..	363.3
Other loans	79.5	10.9	90.5	98.2	10.9	109.2
Total loans	*1,678.8*	*33.7*	*1,712.5*	*2,238.4*	*33.7*	*2,272.1*
Investments—						
Government securities—						
Australia	1,876.9	11.8	1,888.7	1,883.3	11.8	1,895.1
Other	14.6	..	14.6	454.3	0.7	455.0
Securities of local and semi-government bodies	756.7	6.6	763.3	897.8	6.7	904.4
Other investments	2,158.1	127.2	2,285.1	2,612.4	128.0	2,740.4
Total investments	*4,806.2*	*145.5*	*4,951.8*	*5,847.8*	*147.2*	*5,995.0*
Cash on deposit, current account and in hand	74.8	20.1	94.9	87.1	22.6	109.7
Other assets(*a*)	285.4	52.7	338.2	341.6	53.4	394.9
Grand total	**8,516.6**	**261.5**	**8,778.0**	**10,502.0**	**266.3**	**10,768.3**

(*a*) Includes advances of premiums.

LIFE INSURANCE COMPANIES: NEW LOANS PAID OVER(*a*), BY CLASS OF SECURITY AND STATE OR TERRITORY

($'000)

	1971	*1972*	*1973*	*1974*	*1975*
Class of security—					
Mortgage of real estate	157,459	132,958	176,645	198,986	120,308
Companies' policies	65.571	58,448	50,839	75,114	56,669
Other	10,380	19,497	33,983	42,854	25,963
State or Territory(*b*)—					
New South Wales	104,057	90,048	109,253	161,653	77,179
Victoria	61,711	59,671	83,239	99,513	63,958
Queensland	21,633	24,065	23.868	26,002	18,243
South Australia(*c*)	18,307	13,526	18,973	21,717	17,607
Western Australia	19,588	13,189	13,193	22,389	14,716
Tasmania	4,688	4,425	4,560	6,307	5.027
Australian Capital Territory	3,425	5,977	8,382	9,374	6,220
Total	**233,410**	**210,904**	**261,468**	**316,956**	**202,945**

(*a*) Excludes advances of premiums. (*b*) State or Territory of location of mortgage, registration of policy or residence of borrower. (*c*) Includes Northern Territory.

General Insurance

The following statistics, which are in respect of the Australian business of companies operating in Australia and State Government insurance offices, conform to the following definitions and should be interpreted accordingly.

(*a*) *Accounting Period*—The data *does not relate to uniform accounting periods* but to the financial years of the organisations which ended during the years shown.

(*b*) *Premiums* represent the full amount receivable in respect of policies issued or renewed during the year, less stamp duty, less returns, rebates and bonuses paid or credited to policy holders during the year. They are not adjusted to provide for premiums unearned at the end of the year, and consequently the amounts differ from 'earned premium income' appropriate to the year.

(*c*) *Claims* comprise payments made during the year, plus the estimated amount of outstanding claims at the end of the year, less the estimated amount of outstanding claims at the beginning of the year. Salvage and other amounts recoverable have been deducted.

(*d*) *Contributions to fire brigades, commission, agents' charges and expenses of management* are mainly charges paid during the year.

(*e*) *Expenses of management*—expenses of the Australian Control Office of each organisation are allocated as management expenses proportionally between the States on the basis of premiums receivable in each State.

(*f*) *Taxation* is mainly payments made during the year and includes pay-roll tax, licence fees, etc. Stamp duty and income tax are excluded.

During 1974–75 revenue from premiums amounted to $2,023.4 million, and that from net interest on investments, etc., to $124.7 million. Expenditure on claims amounted to $1,766.0 million, contributions to fire brigades $53.0 million, commission and agents' charges $131.9 million, expenses of management $301.6 million, and taxation $25.6 million. Income tax paid amounted to $8.9 million.

GENERAL INSURANCE: PREMIUMS AND CLAIMS BY PRINCIPAL CLASS OF RISK, AUSTRALIA

($'000)

Class of risk	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
PREMIUMS (LESS RETURNS, REBATES AND BONUSES)					
Fire (*a*)	149,737	170,904	181,633	208,829	241,493
House Owners' and Householders'	73,469	86,381	104,164	127,316	163,756
Contractors' All Risks	8,248	10,036	10,043	11,448	12,132
Marine and Aviation	58,625	67,331	64,509	69,087	80,733
Motor Vehicle Comprehensive	252,225	300,343	329,932	366,126	473,449
Compulsory Third Party (Motor Vehicle)	158,486	172,505	183,877	206,423	306,781
Employers Liability (*b*)	181,792	236,546	291,248	380,201	580,666
Public Liability (*c*)	27,934	33,254	36,544	41,505	45,337
All other	92,564	108,528	123,479	139,819	155,212
Total	**1,003,078**	**1,185,826**	**1,325,427**	**1,550,754**	**2,059,558**
CLAIMS (LESS AMOUNTS RECOVERABLE)					
Fire (*a*)	67,420	77,503	83,728	113,643	(*d*)196,834
Houseowners' and Householders'	24,580	34,951	41,069	52,647	175,293
Contractors' All Risks	4,142	5,197	5,436	6,944	16,661
Marine and Aviation	29,597	28,374	28,477	44,963	61,282
Motor Vehicle Comprehensive	186,673	217,933	223,364	268,856	349,631
Compulsory Third Party (Motor Vehicle)	151,431	181,920	211,249	284,712	366,713
Employers Liability (*b*)	126,850	165,021	245,008	353,838	494,143
Public Liability (*c*)	14,313	13,530	17,296	23,196	31,655
All other	40,940	49,896	50,509	59,419	76,843
Total	**645,947**	**774,323**	**906,136**	**1,208,221**	**1,769,055**

(*a*) Includes Sprinkler Leakage, Crop, Hailstone and Loss of Profits insurance. (*b*) Excludes workers' compensation in coal-mining industry. (*c*) Includes Product Liability and Professional Indemnity insurance. (*d*) Excludes crop insurance in Northern Territory, which is included in 'All other'.

Summary information on foreign ownership and control of general insurance business is shown in Chapter 11. More detailed statistics are available in *Foreign Ownership and Control of General Insurance Business,* (*Advance Release*) 1972–73 (5.48) and *Foreign Ownership and Control of General Insurance Business,* 1972–73 (5.52).

PENSION AND SUPERANNUATION SCHEMES

Public authority pension and superannuation schemes

The Australian and all State Governments have established pension and superannuation schemes for their employees. These schemes are operated through funds to which both the Governments and their employees make contributions. Employees of local government and semi-government authorities are covered either by the Australian and State Government schemes or by a separate scheme of the authority which is operated either through a separately constituted fund or through a life insurance office.

Schemes operated through separately constituted funds

PUBLIC AUTHORITY PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH SEPARATELY CONSTITUTED FUNDS

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Income—	$'000	$'000	$'000	$'000	$'000
Contributions—					
Employees	157,973	193,643	214,773	247,518	320,343
Employing authorities	171,918	219,658	238,036	270,708	345,283
Interest, dividends and rent	104,889	125,872	145,573	154,881	194,411
Transfers	..	29	1,149	10,245	8,349
Other income	12,734	9,000	13,238	10,941	14,387
Total income	**447,513**	**548,202**	**612,769**	**694,292**	**882,774**
Expenditure—					
Pensions	161,177	193,999	216,060	231,296	286,441
Lump sum payments—					
On retirement, death, resignation or dismissal(*a*)	69,334	88,725	95,785	119,139	127,047
Gratuities	4,459	4,124	3,900	2,327	3,737
Other expenditure	15,877	14,182	16,610	33,342	121,469
Total expenditure	**250,847**	**301,029**	**332,355**	**386,105**	**538,694**
Assets at end of year—					
Cash—					
Deposits with Treasury	60,270	65,649	80,360	112,698	132,861
Other deposits and cash	31,676	29,271	28,994	90,235	88,171
Australian Government securities	166,125	188,465	208,969	176,572	204,058
Local and semi-government securities	1,077,769	1,192,368	1,284,863	1,259,622	1,336,265
Mortgages—					
Housing	39,619	44,159	48,561	62,428	70,476
Other	220,878	286,690	383,284	442,786	526,128
Loans to building societies	34,893	52,775	48,220	48,614	55,921
Company shares, debentures and notes	121,518	158,406	218,081	247,226	308,451
Other assets	129,961	152,154	168,968	155,352	222,157
Total assets(*b*)	**1,882,708**	**2,169,936**	**2,470,300**	**2,595,533**	**2,944,488**
Less Sundry creditors, etc.	22,335	32,162	52,111	64,484	62,771
Accumulated funds(*b*)	**1,860,373**	**2,137,775**	**2,418,189**	**2,531,049**	**2,881,717**
	No.	No.	No.	No.	No.
Contributors at end of year	598,804	689,113	705,016	662,406	719,334
Pensioners at end of year—					
Ex-employees	70,620	74,861	78,360	61,621	n.a.
Widows	30,606	39,960	44,168	45,828	n.a.
Children	6,906	7,559	7,680	5,366	n.a.

(*a*) Includes refunds of contributions to continuing members. (*b*) Includes assets of the Voluntary Savings Scheme of the State Superannuation Fund in South Australia.

Schemes operated through life insurance offices

PUBLIC AUTHORITY PENSION AND SUPERANNUATION SCHEMES OPERATED THROUGH LIFE INSURANCE OFFICES

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Income—						
Contributions—						
Employees . . .	$'000	12,985	11,187	11,259	12,210	18,363
Employing authorities .	$'000	17,782	15,042	15,929	16,425	23,705
Contributors at end of year .	No.	91,429	62,322	62,332	60,871	63,404

Parliamentary pension and superannuation schemes

Pension and superannuation schemes have been established for members of the Australian and State Parliaments. All the schemes are operated through funds to which the members of Parliament and the Australian or State Governments contribute.

PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES(*a*)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	$'000	$'000	$'000	$'000	$'000
Income—					
Contributions—					
Members	657	767	855	766	988
Government	1,322	1,386	1,820	2,273	2,949
Interest and other income . . .	400	456	482	374	481
Total income . . .	**2,379**	**2,608**	**3,158**	**3,413**	**4,417**
Expenditure—					
Pension payments	1,395	1,599	1,778	1,477	1,805
Other	294	259	1,102	789	1,893
Total expenditure . . .	**1,690**	**1,858**	**2,880**	**2,266**	**3,697**
Assets at end of year—					
Cash—					
Deposits with Treasury	86	188	368	708	693
Other deposits and cash . . .	34	192	113	266	15
Australian Government securities .	1,005	1,064	1,034	352	352
Local government and semi-government securities	4,344	4,511	4,655	3,166	4,267
Other assets	1,522	1,778	1,853	2,249	2,861
Total assets	**6,991**	**7,734**	**8,024**	**6,741**	**8,189**
Less Sundry creditors, etc. . . .	21	13	25	28	756
Accumulated funds . . .	**6,970**	**7,720**	**7,999**	**6,713**	**7,433**
	No.	No.	No.	No.	No.
Contributors at end of year—					
Males	656	717	718	535	531
Females	9	15	15	15	19
Pensioners at end of year—					
Ex-members	304	280	312	230	230
Widows(*b*)	213	215	215	166	167

(*a*) Includes the Ministerial Retiring Allowances Fund. (*b*) Includes children in receipt of Australian Parliamentary pensions.

Coal and oil-shale mine workers' superannuation schemes

In all States except South Australia superannuation schemes have been established for coal and oil-shale mine workers. These schemes are operated through funds to which mine workers, mine owners and the State Governments contribute.

COAL AND OIL-SHALE MINE WORKERS' SUPERANNUATION SCHEMES(a)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	$'000	$'000	$'000	$'000	$'000
Income—					
Contributions	6,664	7,473	7,668	7,739	9,547
Interest, dividends, rent and other income	1,447	1,530	1,597	1,726	1,935
Total income	**8,111**	**9,003**	**9,265**	**9,465**	**11,482**
Expenditure—					
Pensions and lump sum payments	7,360	7,987	7,749	7,827	9,391
Other	210	330	282	320	377
Total expenditure	**7,570**	**8,317**	**8,031**	**8,147**	**9,769**
Assets at end of year—					
Local government and semi-government securities	24,227	25,074	25,961	26,768	29,102
Other assets	1,884	1,688	2,080	2,644	2,077
Total assets	**26,111**	**26,761**	**28,041**	**29,412**	**31,180**
Less Sundry creditors, statutory reserve funds, etc.	144	109	154	67	276
Accumulated funds	**25,967**	**26,652**	**27,887**	**29,345**	**30,904**
	No.	No.	No.	No.	No.
Number of contributions at end of year	18,697	18,970	18,742	19,102	21,542
Number of pensioners at end of year	11,770	11,657	11,976	12,044	12,090

(a) Operating in all States except South Australia.

Private superannuation, pension and retiring allowance schemes

In 1955–56, 1960–61, 1961–62 and 1962–63 the Bureau conducted sample surveys of pension and retiring allowance schemes in private businesses subject to pay-roll tax, other than in rural industries, private domestic service, and certain businesses such as accountants, trade associations, consultant engineers, etc. Commonwealth Government airlines and banks were included where they had established their own funds separately from the Commonwealth Government superannuation funds, but statutory coal miners' pension funds were excluded. Details were asked for three types of pension and retiring allowance schemes. They were (*a*) schemes operated through life insurance offices, (*b*) schemes operated through separately constituted funds, and (*c*) direct payments of pensions and retiring allowances.

The results of the 1955–56 survey are available in *Finance* Bulletin No. 47, Part I—*Public and Private Finance*, and the 1960–61, 1961–62 and 1962–63 survey results were published in *Insurance and Other Private Finance*, Bulletin No. 2 and Year Book No. 51 (pages 898–900).

For the years 1956–57 to 1958–59, 1963–64 and 1964–65, information was collected from a small number of the larger separately constituted funds. Although only a small number of funds was included in these collections they accounted, in 1962–63, for about 27 per cent of the income, 28 per cent of the expenditure and about 34 per cent of the total assets of the separately constituted funds covered by the more comprehensive sample survey conducted for 1962–63.

Information for these selected funds for the years 1955–56, 1960–61, 1961–62 and 1962–63 was extracted from the returns obtained in the sample surveys conducted for those years and results of the survey for 1964–65, together with comparative figures for previous years, were published in April 1966 in a mimeographed bulletin (S.B. 383).

In order to improve the coverage of the published statistics of private pension funds, returns were collected from some additional funds for 1964–65 and tabulated with the returns from the survey for 1964–65 referred to above. The separately constituted private pension funds included in the enlarged 1964–65 survey together accounted, in 1962–63, for about 72 per cent of the total contributions, 71 per cent of the income, 68 per cent of the expenditure and 77 per cent of the assets of the separately constituted funds covered by the more comprehensive sample survey conducted for 1962–63. The results of the enlarged 1964–65 survey were published in September 1966 in a mimeographed bulletin (S.B. 493).

Further surveys, relating to the same funds that were included in the enlarged 1964–65 survey of selected private pension funds, have been made in respect of each year from 1965–66 to 1974–75 inclusive. Since the *Survey of Selected Private Pension Funds* for 1974–75 is not a representative sample it is not known to what extent their share of the whole field has changed since the 1962–63 survey; nor is the pattern of income, expenditure and asset distribution of the large funds included in this survey necessarily representative of the whole field.

The statistics do not relate to uniform accounting periods but to the financial years of the funds which ended in the years shown.

SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: INCOME AND EXPENDITURE

($ million)

INCOME

	Employees' contributions	*Employers' contributions*	*Interest on Aust. Govt local and semi-government securities*	*Other interest, dividends and rent*	*Profit from sale or revaluation of assets*	*Other income(a)*	*Total income*
1970–71 . .	43.9	84.0	28.0	50.9	4.1	4.0	214.8
1971–72 . .	48.0	91.7	30.6	56.0	16.2	9.0	251.5
1972–73 . .	59.0	106.8	35.8	65.0	18.5	6.7	291.9
1973–74 . .	68.0	146.4	33.6	79.9	8.8	5.1	341.8
1974–75 . .	87.1	194.8	40.8	98.3	3.5	12.4	436.9

EXPENDITURE

	Pensions paid			*Lump sum payments*						
				To former employees						
	Ex-employees	*Widows or children*	*Total*	*On retirement*	*On resignation or dismissal*	*To widows or children*	*Total*	*Loss on sale or revaluation of assets*	*Other expenditure (b)*	*Total expenditure*
1970–71 .	23.3	4.2	27.5	25.7	17.4	4.4	47.5	7.3	6.2	88.5
1971–72 .	28.6	4.4	33.0	31.3	20.0	4.6	55.9	3.4	5.3	97.3
1972–73 .	31.7	4.9	36.6	43.1	23.0	5.9	72.0	2.0	10.1	120.7
1973–74 .	36.8	5.6	42.4	45.3	27.3	5.9	78.5	19.3	10.5	150.7
1974–75 .	42.9	6.5	49.4	52.1	30.7	6.5	89.3	21.1	38.5	198.3

(*a*) Includes receipts from life insurance offices, sub-underwriting commissions, etc. (*b*) Includes administrative expenses payable from funds, payments to life insurance offices, etc.

SELECTED SEPARATELY CONSTITUTED PRIVATE PENSION FUNDS: ASSETS(*a*)

	Cash in hand or in bank	Aust. Govt securities	Local ana semi-government securities	Loans on mortgage		Company debentures, notes, etc(*b*)	Shares in companies	Land and buildings	All other assets (*c*)	Total assets	Less sundry creditors, etc.	Amount of funds in Australia
				To companies	Other							
						AMOUNT ($ million)						
1970–71 .	24.4	242.3	221.4	106.4	41.3	320.6	400.9	26.1	35.2	1,418.6	10.0	1,408.5
1971–72 .	35.0	280.9	227.8	102.2	51.5	345.3	449.5	34.2	46.5	1,572.8	10.1	1,562.7
1972–73 .	36.2	311.3	235.8	137.9	35.7	371.1	506.7	43.7	70.1	1,748.4	12.8	1,735.7
1973–74 .	32.2	353.3	242.8	148.8	46.8	392.9	568.5	53.2	100.9	1,939.5	14.4	1,925.0
1974–75 .	41.6	400.4	254.4	173.7	39.8	431.4	613.3	73.0	135.7	2,163.3	13.5	2,149.8
						PERCENTAGE DISTRIBUTION						
1970–71 .	1.7	17.1	15.6	7.5	2.9	22.6	28.3	1.8	2.5	100.0	0.7	99.3
1971–72 .	2.2	17.9	14.5	6.5	3.3	22.0	28.6	2.2	3.0	100.0	0.6	99.4
1972–73 .	2.1	17.8	13.5	7.9	2.0	21.2	29.0	2.5	4.0	100.0	0.7	99.3
1973–74 .	1.7	18.2	12.5	7.7	2.4	20.3	29.3	2.7	5.2	100.0	0.7	99.3
1974–75 .	1.9	18.5	11.7	8.0	1.8	20.0	28.4	3.4	6.3	100.0	0.6	99.4

(*a*) Book values at balance dates. (*b*) Includes other loans to companies. (*c*) Includes loans to authorised dealers in the short-term money market and loans to building societies.

FINANCE COMPANIES

Information relating to the lending operations of finance companies in Australia is given in the following tables. A comprehensive account of the scope of these statistics and fuller details of the transactions of finance companies, together with definitions of the various categories of finance agreements and of the items of data given in the tables, are provided in the bulletin *Finance Companies Transactions* 1973–74 (5.13) and in the monthly statements *Finance Companies* (5.14). For the purposes of these statistics, finance companies are defined as companies which are engaged mainly in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: instalment credit for retail sales, personal loans, wholesale finance, factoring, other consumer and commercial loans, financial leasing of business plant and equipment, and bills of exchange. The finance companies covered in these statistics, insofar as they provide instalment credit for retail sales, are also *included* in the statistics of Instalment Credit for Retail Sales (*see* pages 542–3.).

In general, companies which are engaged both in financing activities and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above and/or a major proportion of their income is derived from such assets. Companies are excluded if the major proportion of their balances outstanding consists of agreements written for the purpose of financing their own sales. Companies which are engaged mainly in financing, in any way, the operations of related companies ('related' as defined in the Companies Act) are also *excluded* from these statistics, as are unincorporated finance companies. Also *excluded* are the following classes of financial and quasi-financial institutions: banks; life insurance companies; fire, marine and general insurance companies; short-term money market dealers; pastoral finance companies; investment companies; unit trusts; land trusts; mutual funds and management companies for the foregoing trusts and funds; pension and superannuation funds; building and friendly societies; credit unions.

Breaks in series: The scope of the monthly collection has been altered on a number of occasions since July 1970. The major changes are as follows: (i) from July 1971, the definition of a finance company was altered to raise the exclusion level on balances outstanding from $100,000 to $500,000; (ii) from July 1973, the definition of a finance company was altered to include financial leasing of business plant and equipment and bill of exchange transactions as qualifying assets; and (iii) from July 1973, the item 'Instalment Credit for Retail Sales' has been redefined to exclude details of financing 'producer' type goods such as plant and machinery, tractors, earthmoving equipment, business machines and commercial motor vehicles. Details of the financing of such goods are now included in 'Other Commercial Loans'.

Summary information on foreign ownership and control of finance companies is shown in Chapter 11. More detailed statistics are available in *Foreign Ownership and Control of Finance Companies* (*Advance Release*) 1973 (5.47) and *Foreign Ownership and Control of Finance Companies*, 1973 (5.50).

FINANCE COMPANIES: SUMMARY, AUSTRALIA

($ million)

		Collections and other liquidations			*Balances outstanding at end of year*		
	Amount financed	*Contracts including charges*	*Contracts excluding charges*	*All contracts*	*Contracts including charges*	*Contracts excluding charges*	*All contracts (a)*
1971–72	5,512.6	2,020.2	3,449.6	5,469.8	3,077.0	1,821.8	4,898.7
1972–73	5,704.5	2,414.7	3,301.2	5,715.8	3,435.2	2,228.3	5,663.5
1973–74	7,256.9	2,671.3	3,966.4	6,637.5	4,409.2	3,446.3	7,855.5
1974–75	5,721.3	2,780.9	4,006.5	6,787.4	4,432.5	3,672.2	8,104.8
1975–76	7,618.2	3,232.9	5,021.0	8,254.0	5,369.8	3,857.2	9,227.0

(*a*) Amounts shown in this column are intended to provide a broad overall measure of total balances outstanding. However, movements in this series may be affected by changes in the proportions of the two components of the series to the total.

FINANCE COMPANIES: AMOUNT FINANCED, COLLECTIONS AND OTHER LIQUIDATIONS OF BALANCES, AND BALANCES OUTSTANDING BY TYPE OF AGREEMENT

($ million)

					Other consumer and commercial loans(a)		
	Instalment credit for retail sales	*Personal loans*	*Wholesale finance*	*Factoring*	*Contracts including charges*	*Contracts excluding charges*	*Total*
	AMOUNT FINANCED DURING YEAR						
1971–72	1,121.8	206.4	1,294.0	98.5	2,791.9		5,512.6
1972–73	1,193.8	272.7	1,439.5	109.1	2,689.3		5,704.5
1973–74	1,146.2	341.5	1,845.6	152.0	3,771.4		7,256.9
1974–75	1,154.5	335.5	2,143.5	183.2	1,904.7		5,721.3
1975–76	1,389.2	505.3	2,873.9	237.4	2,612.5		7,618.2
	COLLECTIONS AND OTHER LIQUIDATIONS OF BALANCES DURING YEAR						
1971–72	1,405.6	199.0	1,268.7	115.4	444.4	2,036.8	5,469.8
1972–73	1,491.0	280.5	1,473.4	126.4	678.3	1,666.3	5,715.8
1973–74	1,352.4	349.3	1,817.0	159.8	1,004.8	1,954.3	6,637.5
1974–75	1,432.8	390.1	2,130.0	212.5	999.2	1,622.8	6,787.4
1975–76	1,613.9	521.9	2,721.0	264.9	1,073.8	2,058.3	8,254.0
	BALANCES OUTSTANDING AT END OF YEAR						
1971–72	1,791.2	278.4	237.0	25.7	1,028.1	1,538.4	4,898.7
1972–73	1,866.8	373.6	224.4	27.2	1,220.2	1,951.3	5,663.5
1973–74	1,762.4	524.0	284.4	41.0	2,158.6	3,085.0	7,855.5
1974–75	1,922.0	579.7	357.7	45.1	1,976.0	3,224.2	8,104.8
1975–76	2,248.3	774.3	589.6	51.3	2,310.0	3,253.5	9,227.0

(*a*) Prior to July 1972, included liquidity placements.

FINANCE COMPANIES: LEASING, BILLS OF EXCHANGE AND LOANS TO NON-FINANCE COMPANIES, AUSTRALIA

($ million)

	Leasing of business equipment and plant		*Bills of exchange*			
	Value of goods newly leased during period	*Value of all leasing agreements at end of period*	*Amounts paid for bills acquired during period*	*Amounts received for bills disposed of during period*	*Balances outstanding at end of period*	*Loans to non-finance companies in group*
1971–72 . .	304.1	648.0(*a*)	346.6	318.5	83.7	30.2
1972–73 . .	400.9	803.8	493.8	453.4	124.1	52.4
1973–74 . .	668.2	1,234.9	2,105.5	2,013.7	410.5	142.1
1974–75 . .	586.2	1,430.0	3,578.8	3,516.0	547.8	197.9
1975–76 . .	1,007.8	1,915.5	4,177.4	4,055.1	658.6	262.9

(*a*) As from July 1971 the valuation is 'gross receivables' and figures have been partly estimated. For more details *see* explanatory notes to the bulletin *Finance Companies Transactions* 1973–74 (Reference No. 5.13).

INSTALMENT CREDIT FOR RETAIL SALES

Information relating to instalment credit for retail sales in Australia is given in the following tables. More detailed information may be found in the July, August and September 1973 issue of the monthly bulletin *Instalment Credit for Retail Sales* (5.46).

The statistics cover the operations of instalment credit schemes which relate primarily to the financing of retail sales of consumer commodities. In general, the term instalment credit is defined as relating to schemes in which repayment is made by regular predetermined instalments (predetermined by amount or by percentage of amount financed or balance outstanding). Types of instalment credit schemes covered include hire purchase, time payment, budget account and personal loans where these schemes relate primarily to the financing of retail sales of consumer commodities.

Figures for amounts financed *exclude* interest, hiring charges, insurance, etc. Figures for balances outstanding and collections *include* interest, hiring charges, insurance, etc.

INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF BUSINESS: AMOUNT FINANCED, BY COMMODITY GROUP, COLLECTIONS, AND BALANCES OUTSTANDING, AUSTRALIA

($ million)

	Amount financed during year					*Collections and other liquidations of balances during year*	*Balances outstanding at end of year*
	Motor cars and station waggons		*Other motor vehicles (a)*	*Household and personal goods*	*Total*		
	New	*Used*					
Finance companies—							
1973–74 . .	371.7	468.5	78.9	227.1	1,146.2	1,352.4	1,761.9
1974–75 . .	428.5	413.3	75.4	237.4	1,154.5	1,432.8	1,922.0
1975–76 . .	433.6	536.6	124.4	294.5	1,389.2	1,613.9	2,248.3
Other businesses(*b*)—							
1973–74 . .	1.0	0.8	5.6	219.1	226.4	233.8	174.1
1974–75 . .	0.4	0.4	5.6	239.0	245.4	263.0	174.8
1975–76 . .	0.3	0.1	5.9	237.9	244.1	267.8	172.4
Total—all businesses—							
1973–74 . .	372.7	469.2	84.4	446.2	1,372.5	1,586.3	1,935.9
1974–75 . .	428.9	413.7	81.0	476.4	1,400.0	1,695.8	2,096.8
1975–76 . .	433.9	536.7	130.3	532.4	1,633.3	1,882.0	2,420.8

(*a*) Includes new and used motor cycles, boats, caravans, trailers and motor parts and accessories but excludes panel vans, utilities, trucks, tractors and other vehicles normally used for commercial purposes.

(*b*) Businesses operating retail establishments, unincorporated finance businesses and businesses other than wholesalers and manufacturers.

INSTALMENT CREDIT FOR RETAIL SALES, BY TYPE OF CREDIT AMOUNT FINANCED, BY COMMODITY GROUP, AUSTRALIA

($ million)

	Motor cars and station waggons		*Other motor vehicles (a)*	*Household and personal goods*	*Total*
	New	*Used*			
Hire purchase—					
1973–74 . . .	273.6	354.0	64.7	150.4	842.7
1974–75 . . .	310.8	283.5	60.3	132.9	787.5
1975–76 . . .	318.4	379.8	100.6	143.4	942.3
Other instalment credit—					
1973–74 . . .	99.0	115.2	19.8	295.8	529.8
1974–75 . . .	118.1	130.2	20.7	343.5	612.4
1975–76 . . .	115.5	156.8	29.6	389.0	691.0
Total instalment credit—					
1973–74 . . .	372.7	469.2	84.4	446.2	1,372.5
1974–75 . . .	428.9	413.7	81.0	476.4	1,400.0
1975–76 . . .	433.9	536.7	130.3	532.5	1,633.3

(*a*) Includes new and used motor cycles, boats, caravans, trailers and motor parts and accessories but excludes panel vans, utilities, trucks, tractors and other vehicles normally used for commercial purposes.

PASTORAL FINANCE COMPANIES

PASTORAL FINANCE COMPANIES: RURAL ADVANCES AMOUNTS OUTSTANDING(*a*)

(*Source:* Reserve Bank of Australia)

($ million)

End of June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A. and Tas.*	*Total*
1971 . . .	70.8	57.2	69.6	73.7	61.7	333.0
1972 . . .	60.6	57.2	57.0	63.3	54.4	292.5
1973 . . .	65.3	68.0	53.3	57.3	59.2	303.1
1974 . . .	78.0	86.1	59.1	72.0	76.0	371.1
1975 . . .	51.6	55.8	44.8	68.0	59.1	279.4

(*a*) Compiled from returns supplied to the Reserve Bank by major pastoral finance companies. Advances are classified according to the location of the branch holding the advance, which in some cases may differ from the State of residence of the borrower.

PASTORAL FINANCE COMPANIES: LIABILITIES AND ASSETS(*a*)

(*Source:* Reserve Bank of Australia)

($ million)

LIABILITIES

End of June—	*Balances due to banks*	*Clients' credit balances*	*Debentures, notes and deposits*		*Other outside liabilities*	*Share-holders' funds*	*Overseas liabilities*	*Total liabili-ties/ assets*
			Maturing within twelve months	*Other*				
1971 . .	96.2	31.9	85.3	78.4	122.1	179.6	128.6	722.0
1972 . .	57.1	35.1	137.6	86.4	150.2	183.3	124.0	773.6
1973 . .	54.7	57.6	207.5	94.3	196.6	199.1	129.3	939.1
1974 . .	121.8	48.9	176.9	94.4	194.1	210.7	137.9	984.7
1975 . .	74.7	37.5	209.0	105.7	192.8	259.7	86.7	966.1

ASSETS

End of June—	*Cash and deposits with banks*	*Loans to author-ised money market dealers*	*Other short-term assets (b)*	*Aust. Govt securi-ities*	*Advances and sundry debtors*		*Stocks*	*Fixed assets*	*Other assets*
					Rural	*Other*			
1971 . .	10.7	3.3	28.8	35.7	333.0	33.9	42.3	190.9	43.3
1972 . .	10.0	15.0	60.8	65.7	292.5	32.1	48.9	185.3	63.4
1973 . .	14.9	19.1	171.7	58.3	303.1	45.7	67.2	190.0	69.2
1974 . .	14.5	10.5	127.0	21.4	371.1	61.8	95.8	205.3	77.4
1975 . .	11.2	5.7	149.1	27.8	279.4	61.5	114.8	236.4	80.4

(*a*) Compiled from returns supplied to the Reserve Bank by major pastoral finance companies. (*b*) Excludes Australian Government securities.

RURAL DEBT

Major sources of credit for rural purposes include banks, Australian and State governments, financial agencies, pastoral finance companies, and life insurance companies. The following table shows the estimated rural debt to these lenders.

ESTIMATED RURAL DEBT TO SPECIFIED LENDERS

(*Source:* Reserve Bank of Australia)

($ million)

Lender	30 June— 1971	1972	1973	1974	1975
Major trading banks	994	963	1,051	1,161	1,220
Ex-service settlement	83	79	71	61	58
Other government, including State banks and State savings banks	374	432	481	500	552
Pastoral finance companies	333	293	303	371	279
Commonwealth Development Bank	192	202	198	203	232
Life insurance companies	129	125	117	107	104
Total	**2,104**	**2,094**	**2,221**	**2,403**	**2,445**

In addition, credit is supplied to the rural sector by finance companies, merchants, co-operative producer organisations, and by private lenders and investors, the most noteworthy of these last-mentioned sources involving family arrangements and property vendors. No data are currently available on the extent of the outstanding debt by the rural sector to these sources.

NEW CAPITAL RAISINGS BY COMPANIES IN AUSTRALIA

Information relating to capital raised by companies in Australia is given in the following tables. More detailed information may be found in the quarterly bulletin *New Capital Raisings by Companies in Australia* (5.9).

In general, in the case of listed companies, these statistics cover capital raised through share and debenture subscriptions and by way of deposits, unsecured notes and loans secured over the entire assets of the company; in the case of unlisted companies, they cover capital raised through share subscriptions and by way of loans secured over the entire assets of the company. The following funds are excluded:

(*a*) All capital raised from Australian banks (other than direct equity investment) i.e., overdrafts, mortgage loans, term loans or debentures,

(*b*) Temporary advances or short-term deposits from any source, and

(*c*) Complete or partial issues by Australian companies on overseas markets taken up through overseas brokers.

Classification of companies and securities

Listed companies are companies incorporated in Australia whose shares, debentures, or other securities are listed on one or more of the Australian Stock Exchanges. For such companies new capital includes:

(*a*) all issues of ordinary shares if any ordinary shares are listed,

(*b*) all issues of preference shares if any preference shares are listed, and

(*c*) all issues of debentures, unsecured notes, secured and unsecured loans, and deposits if any shares or other securities are listed.

Unlisted companies are all other companies (including subsidiaries of listed companies and of overseas companies) incorporated in Australia (excluding overseas territories). Statistics of capital raisings for such companies include raisings not covered by (i) and debentures, notes, etc., raised by overseas public companies through their Australian offices.

The following notes relate to specific items in the tables.

New Money

This is the net amount of cash transferred from the 'investing public' to the 'company sector'. For this purpose the 'investing public' is defined to include all non-company subscribers, Australian life insurance companies, Australian government and private superannuation funds and banks. In practice, it is necessary to include in 'new money' most subscriptions by companies holding less than 5 per cent of the ordinary shares of an issuing company as it is not practicable to separately identify all such subscriptions. However, where large subscriptions by companies holding less than 5 per cent of the ordinary shares in the issuing company are identified they are not included in 'new money'. Subscriptions by Australian life insurance companies and Australian government and private superannuation funds are included in 'new money' irrespective of their holdings of ordinary shares in the issuing company. Subscriptions by overseas banks, life insurance companies and superannuation funds are excluded from 'new money' whether they hold more or less than 5 per cent of the ordinary shares of the issuing company.

Amount not involving new money

This amount includes cash subscriptions received by issuing companies from associated companies. Also included are amounts which, although subscribed by the 'investing public' (i.e. subscribers other than 'associated companies') are not retained by the issuing company or its associates, but are used to redeem shares, debentures or unsecured notes, etc., or are used to purchase, from individuals, existing shares, debentures, etc., in other companies, including existing shares, etc., in associated and subsidiary companies, and therefore do not represent a net transfer of cash from the 'investing public' to the companies. In the tables which follow, the 'amount not involving new money' is obtained by deducting from the total cash raised the amount of 'new money'.

LISTED COMPANIES: NEW CAPITAL RAISED THROUGH ISSUES OF SHARES DEBENTURES, OR REGISTERED NOTES, ETC (*a*), OR ACCEPTING DEPOSITS(*b*)

($ million)

	Share capital						*Debentures, registered notes and deposits*		
	Value of issues commenced	*Non-cash issues commenced (c)*	*Cash issues commenced*	*Cash raised during period (d)*	*Amount not involving new money*	*New money*	*Total amount raised (e)*	*Amount not involving new money (e)*	*New money*
1971–72	655.4	398.8	256.5	342.2	87.3	255.0	3,650.3	2,925.5	724.9
1972–73	712.5	405.0	307.5	362.5	159.3	203.2	3,629.6	3,026.0	603.6
1973–74(*f*)	973.8	610.3	363.4	382.0	116.5	265.6	6,794.5	5,505.6	1,288.9
1974–75	399.4	122.3	277.1	296.7	125.6	171.1	6,310.6	5,362.0	948.6
1975–76	500.4	125.8	374.6	378.8	55.2	323.6	5,046.7	3,952.0	1,094.7

(*a*) Includes convertible notes. (*b*) Deposits accepted by banks, life insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market are excluded. (*c*) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (*d*) Amounts paid up on issues commenced during the year plus calls on issues commenced in earlier years. (*e*) Includes conversions, renewals, etc. (*f*) Prior to July 1973 includes details of companies incorporated in Papua New Guinea.

UNLISTED COMPANIES: NEW CAPITAL RAISED THROUGH ISSUE OF SHARES AND LOANS SECURED BY CHARGES OVER THE COMPANIES' ENTIRE ASSETS

($ million)

	Share capital						*Loans secured by charges over the companies' entire assets*		
	Value of issues commenced(a)	*Non-cash issues commenced (b)*	*Cash issues commenced*	*Cash raised during period (c)*	*Amount not involving new money*	*New money*	*Total amount raised (d)*	*Amount not involving new money (d)*	*New money*
1971–72	783.7	353.1	430.6	469.5	403.8	65.6	127.1	95.2	31.9
1972–73	655.1	287.7	367.4	381.8	319.0	62.8	123.0	79.6	43.4
1973–74	948.6	397.8	550.8	500.3	428.3	71.9	140.8	100.0	40.8
1974–75	567.6	181.9	385.7	418.0	374.0	44.0	110.6	70.8	39.8
1975–76	701.1	303.2	398.0	403.9	360.5	43.5	74.0	60.1	13.9

(*a*) From 1970–71, issues with a nominal value of $200 or less are excluded. (*b*) Includes bonus issues, conversion issues, issues in exchange for existing shares, etc. (*c*) Amounts paid up on issues commenced during year plus calls on issues commenced in previous years. (*d*) Includes conversion, renewals etc.

LISTED AND UNLISTED COMPANIES: NEW MONEY RAISED, BY INDUSTRY GROUP

($ million)

	Companies listed on stock exchanges			*Companies not listed on stock exchanges*			
	Share capital(a)	*Debentures registered notes and deposits(b)*	*Total*	*Share capital(a)*	*Secured loans(c)*	*Total*	*Grand total*
Manufacturing—							
1971–72	31.1	122.6	153.7	11.5	5.7	17.2	170.9
1972–73	66.6	23.9	90.6	9.5	4.6	14.1	104.7
1973–74	82.9	29.5	(*d*)112.4	12.8	3.9	16.7	(*d*)129.1
1974–75	84.3	368.1	452.4	6.8	8.1	14.9	467.3
1975–76	115.0	143.0	258.0	4.9	0.5	5.4	263.4
Finance and property(*b*)—							
1971–72	42.3	563.1	605.4	13.1	19.4	32.5	637.9
1972–73	26.7	532.2	558.9	19.3	27.6	46.9	605.8
1973–74	119.9	1,224.8	(*d*)1 344.7	25.0	21.0	46.0	(*d*)1,390.7
1974–75	18.1	421.6	439.7	7.2	22.3	29.5	469.2
1975–76	77.8	853.3	931.1	7.7	11.4	19.1	950.2
Commerce—							
1971–72	12.3	36.3	48.6	5.6	0.3	5.9	54.5
1972–73	10.5	16.6	27.0	9.0	3.1	12.1	39.2
1973–74	20.6	15.0	(*d*)35.6	5.6	6.0	11.6	47.2
1974–75	36.0	89.2	125.2	2.7	2.3	5.0	130.2
1975–76	39.8	21.0	60.8	2.9	1.0	3.9	64.7
Other industries—							
1971–72	169.3	2.9	172.2	35.3	6.4	41.7	213.9
1972–73	99.5	30.7	130.2	24.8	8.1	33.0	163.1
1973–74	42.4	19.5	(*d*)62.0	28.7	9.9	38.6	(*d*)100.6
1974–75	32.7	69.8	102.5	27.5	7.0	34.5	137.0
1975–76	91.0	77.4	168.4	28.0	1.0	29.0	197.4
All industries—							
1971–72	255.0	724.9	979.9	65.6	31.9	97.5	1,077.2
1972–73	203.2	603.7	806.9	62.8	43.4	106.2	913.1
1973–74	265.6	1,288.9	(*d*)1,554.5	71.9	40.8	112.7	(*d*)1,667.2
1974–75	171.1	948.6	1,119.7	44.0	39.8	83.8	1,203.5
1975–76	323.6	1,094.7	1,418.3	43.5	13.9	57.4	1,475.7

(*a*) Includes preference shares. (*b*) Excludes deposits accepted by banks, insurance companies, pastoral companies and building societies, and loans to authorised dealers in the short-term money market. (*c*) Includes only loans which are secured by charges over the companies' entire assets. (*d*) Prior to July 1973 includes details of companies incorporated in Papua New Guinea.

SHORT-TERM MONEY MARKET

For some years prior to 1959 leading stockbrokers had been actively engaged in the acceptance of short-term funds against the security of government securities, but their operations were limited by the absence of suitable short-term securities and their liquidity requirements. In February 1959 the Commonwealth Bank (now the Reserve Bank) gave official status to the market by announcing that under certain conditions it would act as lender of last resort to authorised dealers in the short-term money market.

The form of organisation consists of nine companies whose functions are:

(i) to accept loans overnight, at call or for fixed periods, in minimum amounts of $50,000 and to invest these funds in money market securities.

(ii) to engage as traders in the buying and selling of money market securities.

The types of securities that may be used as money market securities are subject to the approval of the Reserve Bank. At present they comprise Australian Government securities maturing within five years, commercial bills of any maturity that have been accepted or endorsed by a trading bank, banks' certificates of deposit maturing within five years, and non-bank commercial bills maturing within 180 days.

Dealers are required to have a minimum paid-up capital of $400,000 and there is a limit on the maximum ratio of loans to shareholders' funds.

Under the lender of last resort arrangements dealers may borrow from the Reserve Bank for a minimum of seven days and at a high rate of interest against the lodgment of Australian Government securities.

SHORT-TERM MONEY MARKET: SELECTED LIABILITIES AND ASSETS AND INTEREST RATES OF AUTHORISED DEALERS

(*Source:* Reserve Bank of Australia)

	Liabilities to clients			*Holdings of Aust. Govt securities (at face value)*	*Commercial bills*	*Bank's certificates of deposit*	*Interest rates on loans accepted during month*				*Weighted average interest rate on loans outstanding (a)*
							At call		*For fixed periods*		
	All trading banks	*Other clients*	*Total*				*Minimum per cent per annum*	*Maximum per cent per annum*	*Minimum per cent per annum*	*Maximum per cent per annum*	*per cent per annum*
Month	*Average of weekly figures—($ million)*										
June—											
1972 .	249.8	741.5	991.3	975.0	39.8	20.8	2.00	8.25	4.25	6.60	5.18
1973 .	149.6	670.2	819.8	732.2	40.8	79.7	2.00	8.75	2.00	7.00	4.70
1974 .	65.4	322.0	387.4	285.9	79.2	42.2	0.50	13.00	1.00	13.00	6.82
1975 .	167.4	558.7	726.1	613.3	83.7	47.9	1.50	14.10	3.00	11.50	6.72
1976 .	n.a.	n.a.	818.4	749.7	129.2	61.3	2.00	14.00	4.50	9.50	8.03

(*a*) To June 1975, weighted average of rates on clients' loans outstanding on each Wednesday of the month. Thereafter weighted average of rates paid on *all* days of the four or five weeks ending on the last Wednesday of the month.

SHORT-TERM MONEY MARKET: AUTHORISED DEALERS' LIABILITIES BY TYPE OF CLIENT(*a*)

(*Source:* Reserve Bank of Australia)

($ million)

	30 June—				
Client	*1971*	*1972*	*1973*	*1974*	*1975*
All trading banks	189.2	369.3	212.9	130.4	243.5
Savings banks	77.7	69.0	125.5	51.6	80.5
Insurance offices	26.8	44.8	48.9	12.1	50.2
Superannuation, pension and provident funds	22.4	19.3	16.1	11.8	26.8
Hire purchase and other instalment credit companies	6.1	11.7	7.7	1.5	14.9
Companies, n.e.i.	155.3	253.3	209.4	63.7	180.5
Australian and State Governments	91.9	100.3	75.6	57.6	110.6
Local government and semi-government authorities, n.e.i.	70.0	99.8	91.2	72.0	115.5
All other lenders(*b*)	41.5	71.1	51.0	38.9	27.6
Total	**680.8**	**1,038.7**	**838.2**	**439.5**	**850.0**

(*a*) Compiled from returns supplied by authorised dealers in the short-term money market. Liabilities to Reserve Bank as lender of last resort are excluded. (*b*) Includes marketing boards and trustee companies.

UNIT TRUSTS, LAND TRUSTS AND MUTUAL FUNDS

Statistics of operations of unit trusts, land trusts and mutual funds are shown below. Details of superannuation funds conducted by unit trust management companies are not included in these tables.

TRUSTS AND FUNDS: TOTAL MARKET VALUE AND TRANSACTIONS

($ million)

	Total market value at end of period(a)	Cash transactions—trust units and fund shares		Purchases and sales of investments(b)	
		Total amount received(c)	*Total amount paid(d)*	*Purchases (e)*	*Sales (f)*
1970–71	278.6	56.5	39.3	74.5	51.5
1971–72	326.9	57.9	33.6	78.3	47.0
1972–73	380.3	79.1	32.7	111.5	71.5
1973–74	368.6	68.8	38.6	96.1	50.6
1974–75	356.0	36.9	47.8	38.7	49.4

(*a*) Includes value of land trusts at valuation. (*b*) Australian Government, local authority and semi-government securities, shares, debentures, unsecured notes, loans, deposits on term or notice of three months or longer, land and buildings, etc. (*c*) For trust units and fund shares issued. Includes re-issues and new issues. Includes fees and expenses. (*d*) For trust units and fund shares repurchased. Includes those units and fund shares intended for re-issue. (*e*) Payments for assets acquired during period. Includes brokerage and stamp duty. (*f*) Receipts for assets sold or redeemed during period. Excludes brokerage and stamp duty.

TRUSTS AND FUNDS: ANALYSIS OF PURCHASES AND SALES OF INVESTMENTS

($ million)

	Shares (incl. preference shares)	*Debentures, unsecured notes, deposits (a)*	*Land, buildings, mortgages*	*Other(b)*	*Total*
Purchases—					
1970–71	39.2	10.6	24.6	..	74.5
1971–72	17.2	14.3	42.9	3.9	78.3
1972–73	22.1	18.2	71.0	0.1	111.5
1973–74	12.3	9.8	73.7	0.3	96.1
1974–75	14.8	8.6	15.2	0.1	38.7
Sales—					
1970–71	35.8	8.3	5.1	2.3	51.5
1971–72	30.9	7.9	7.6	0.5	47.0
1972–73	45.3	9.4	15.7	1.1	71.5
1973–74	22.4	10.9	17.0	0.3	50.6
1974–75	14.2	10.6	24.4	0.1	49.3

(*a*) Excludes cash on hand and at bank, loans to authorised dealers in the short-term money market, and other deposits under three months' term or notice. (*b*) Includes Australian Government, local and semi-government securities.

REGISTERED BUILDING SOCIETIES

Permanent and terminating building societies

REGISTERED BUILDING SOCIETIES: SELECTED ITEMS(*a*) AUSTRALIA

	Societies making returns					
	Permanent	*Terminating (b)*	*Total*	*Share-holders*	*Loans paid over*	*Adminis-trative expenses*
	No.	No.	No.	No.	$'000	$'000
1969–70 . . .	182	4,883	5,065	669,371	444,263	21,500
1970–71 . . .	189	5,240	5,429	862,617	453,038	27,139
1971–72 . . .	199	5,461	5,660		666,049	37,750
1972–73 . . .	192	5,718	5,910		1,139,127	52,985
1973–74 . . .	192	6,037	6,229		990,964	82,701

(*a*) At various balance dates within the financial year shown. (*b*) Co-operative housing and other terminating societies.

REGISTERED BUILDING SOCIETIES: LIABILITIES AND ASSETS(*a*), AUSTRALIA ($'000)

	Liabilities						*Assets*		
	Investing members' funds	*Borrowing members' funds*	*Deposits*	*Loans due to govern-ments*	*Other liabilities*	*Total liabilities*	*Advances on mort-gages(b)*	*Other assets*	*Total assets*
1969–70 . .	812,688	174,676	156,849	312,909	475,198	1,932,322	1,776,761	155,561	1,932,322
1970–71 . .	1,132,556	165,747	195,776	348,959	457,272	2,300,311	2,038,305	262,005	2,300,311
1971–72 . .	1,632,953	161,225	259,305	400,626	465,537	2,919,647	2,501,118	418,529	2,919,647
1972–73 . .	2,283,167	159,936	393,882	435,546	552,150	3,824,679	3,274,450	550,229	3,824,679
1973–74 . .	2,833,831	152,604	504,130	471,192	559,273	4,521,032	3,777,948	743,085	4,521,032

(*a*) At various balance dates within the financial year shown. (*b*) Includes advances on mortgages of terminating societies which are mainly on a gross basis. Net advances may be derived by subtracting 'Borrowing members' funds'.

Permanent building societies

The following statistics summarise information obtained from a monthly collection introduced in May 1969 and relate to the operations of permanent building societies in all States and the Australian Capital Territory and the Northern Territory.

PERMANENT BUILDING SOCIETIES: AUSTRALIA SELECTED TRANSACTIONS AND BALANCES ($'000)

	Loans approved during year(a)	*Loans advanced during year(b)*	*Loans approved but not advanced at end of year(c)*	*Principal owing on mortgages at end of year*	*Paid-up share-capital at end of year*	*Borrowings by societies—amount owing at end of year(d)*
1970–71 . . .	428,674	368,524	100,285	1,246,167	1,120,187	322,767
1971–72 . . .	689,387	616,435	150,421	1,702,617	1,624,755	414,190
1972–73 . . .	1,181,062	1,086,974	189,483	2,510,342	2,254,312	638,147
1973–74 . . .	782,305	788,089	138,142	2,920,549	2,690,318	767,988
1974–75 . . .	736,997	599,170	223,308	3,141,379	3,190,604	912,282

(*a*) Includes loans approved for flats and home units, supplementary loans approved to complete the original purchase or construction of a house, flat or home unit and second mortgage loans approved. (*b*) Includes capitalised mortgage insurance premiums and other capitalised charges. (*c*) Excludes cancelltions of loan approvals. (*d*) Includes deposits with societies, advances under Commonwealth and State Housing Agreements but excludes unsecured borrowings from banks.

FRIENDLY SOCIETIES AND CO-OPERATIVE SOCIETIES

Friendly societies

In 1974 the total membership of friendly societies in Australia was about 436,000, but as certain benefits such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies, even when due allowances are made for young and unmarried members. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules conform to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward to the Registrar annual returns about their membership and their finances, and reports dealing with the returns received are published in most of the States.

FRIENDLY SOCIETIES(*a*): SUMMARY, 1973-74

	N.S.W.(b)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.(c)*	*Total*
Registered societies	37	104	17	12	11	9	190
Branches	1,300	1,023	360	426	237	59	3,405
Benefit members at end of year	158,629	145,623	63,605	50,779	13,424	3,740	435,800
Average benefit members during year	155,670	n.a.	63,895	50,722	n.a.	n.a.	n.a.
Members who received sick pay	n.a.	n.a.	4,174	5,644	1,622	543	n.a.
Total weeks sick pay granted	n.a.	312,887	85,167	125,460	44,868	15,574	n.a.
Average sick weeks per member	n.a.	n.a.	20.4	22.2	27.6	28.7	n.a.
Deaths of benefit members	n.a.	2,208	1,327	925	324	194	n.a.
Proportion of deaths per 1,000 members (average)	n.a.	n.a.	20.7	18.2	n.a.	n.a.	n.a.
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Revenue—							
Entrance fees, levies and members' contributions	31,272	37,337	7,402	15,023	5,004	56	96,094
Interest, dividends and rents	2,136	4,137	2,911	1,496	204	98	15,535
All other revenue	513	528		3,120	373	19	
Total revenue	**33,921**	**42,003**	**10,313**	**19,638**	**5,581**	**172**	**111,629**
Expenditure—							
Sick pay	862	558	109	158	34	24	1,744
Medical attendance and medicine	24,594	30,577	7,875	4,981	4,463	1	72,491
Sums payable at death	552	278	243	142	50	42	1,308
Administration	4,593	5,038	1,481	2,149	354	45	29,939
All other expenditure	1,516	3,791		10,616	328	26	
Total expenditure	**32,117**	**40,243**	**9,708**	**18,047**	**5,229**	**138**	**105,482**
Total funds	**40,328**	**58,745**	**12,921**	**24,456**	**5,002**	**1,482**	**142,933**

(*a*) Excludes juvenile branches, dispensaries, medical institutes, and certain miscellaneous societies. Receipts and payments of subsidy under the Commonwealth medical and hospital benefit schemes are excluded. (*b*) Includes the Australian Capital Territory. (*c*) Year ended 31 December 1973.

Co-operative societies

Co-operative societies are divided into three classes: (i) those engaged in the manufacture and marketing of primary products and trade requirements; (ii) those engaged in retailing general household requirements; and (iii) those engaged in activities covered by both classes (i) and (ii). The first class may be described briefly as producers' co-operative societies and the second as consumers' co-operative societies. The particulars given for New South Wales relate to societies registered under the Co-operation Act, 1923–1969. A summary of the business of all co-operative societies for the year 1973–74 for all States is given in the following table.

CO-OPERATIVE SOCIETIES: 1973-74

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Societies . . No.	306	149	222	68	65	15	825
Members . . No.	454,527	169,505	160,946	122,562	68,604	7,186	983,330
	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Income—							
Gross turnover (sales) .	520,915	261,439	257,637	95,480	133,714	10,638	1,279,823
Other income . .	5,917	5,699	18,947	7,029	43,651	488	81,731
Total income .	**526,832**	**267,138**	**276,584**	**102,509**	**177,365**	**11,126**	**1,361,554**
Expenditure—							
Other purchases . .	516,678	194,651	205,881	63,716	118,090	9,229	1,325,933
Other expenditure .		64,215	62,186	39,394	50,252	1,641	
Total expenditure .	**516,678**	**258,866**	**268,067**	**103,110**	**168,342**	**10,870**	**1,325,933**
Rebates and bonuses .	5,339	2,091	4,807	2,764	3,580	64	18,645
Dividends on share capital	2,306	2,794	2,075	605	1,883	71	9,734
Liabilities—							
Paid-up capital . .	47,277	34,912	32,637	9,636	15,814	1,425	141,701
Bank overdrafts . .	65,378	30,983	18,393	12,336	11,487	544	139,121
Accumulated profits .	29,149	4,281	15,805	760	−363	512	156,479
Reserve funds . .		32,596	43,209	11,206	18,358	966	
Loan capital . .	104,536	23,959	20,382	21,195	110,914	956	439,233
Sundry creditors . .		42,011	34,869	8,063	17,586	1,467	
Other liabilities . .		12,585	17,323	16,265	6,790	333	
Total liabilities .	**246,340**	**181,326**	**182,618**	**79,461**	**180,586**	**6,203**	**876,534**
Assets—							
Land and buildings .	82,172	44,416	90,554	15,151	10,217	1,476	377,377
Machinery, plant and other fixed assets .		36,932		13,455	82,253	751	
Stocks . . .	93,714	27,367	16,675	27,544	9,433	922	175,655
Sundry debtors . .	50,899	58,141	56,004	14,090	44,491	1,559	225,184
Cash in hand and on deposit . . .	19,555	4,704	3,254	697	22,734	24	98,320
Profit and loss account		1,449	875	459	11,458	..	
Other assets . .		8,318	15,256	8,066		1,471	
Total assets . .	**246,340**	**181,327**	**182,618**	**79,462**	**180,586**	**6,203**	**876,536**

LOTTERIES AND BETTING

Lotteries

The State Governments of New South Wales, Queensland, South Australia and Western Australia operate lotteries in their own States. Tattersall Sweep Consultations are operated under government licence in Victoria and also sell tickets under government licence in Tasmania and New Zealand. Tickets for any of these lotteries may also be sold in the Northern Territory and the Australian Capital Territory. The statistics of sales of tickets and prizes include the sales and allotments of prizes in New Zealand, Tasmania, the Northern Territory and the Australian Capital Territory. In general, revenue derived by the State Governments from these lotteries is used directly or indirectly to provide funds for expenditure on hospitals, charities, etc.

LOTTERIES: VALUE OF TICKET SALES, PRIZES ALLOTTED, TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Total*
TICKET SALES						
1970–71 . . .	58,057	21,360	18,560	6,000	6,250	110,227
1971–72 . . .	62,389	21,388	20,510	6,200	7,400	117,887
1972–73 . . .	64,563	30,145	20,420	6,746	8,149	130,023
1973–74 . . .	69,395	50,824	21,590	8,023	9,899	159,731
1974–75 . . .	82,680	92,128	30,720	11,975	14,100	231,603
PRIZES ALLOTTED						
1970–71 . . .	35,815	12,816	11,851	3,648	3,803	67,932
1971–72 . . .	38,284	12,833	13,122	3,775	4,506	72,519
1972–73 . . .	39,485	18,087	13,070	4,125	4,958	79,725
1973–74 . . .	42,318	31,310	13,828	4,906	6,008	98,370
1974–75 . . .	53,193	54,150	19,539	7,280	8,672	142,834
TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES(*a*)						
1970–71 . . .	13,127	6,622	4,492	1,833	1,594	27,667
1971–72 . . .	13,655	6,630	4,910	1,979	1,935	29,109
1972–73 . . .	13,923	9,345	4,826	1,894	2,137	32,125
1973–74 . . .	14,506	16,177	5,027	2,351	2,648	40,709
1974–75 . . .	18,729	16,787	7,222	3,648	3,710	50,096

(*a*) Includes grants to Tasmanian and New Zealand governments by Tattersall Sweep Consultations, Victoria.

Betting

TOTALISATOR INVESTMENTS AND INVESTMENTS WITH LICENSED BOOKMAKERS STATES AND AUSTRALIAN CAPITAL TERRITORY

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Total*
TOTALISATOR INVESTMENTS								
1970–71	334,814	273,638	94,534	38,403	67,652	1,322	8,808	819,172
1971–72	394,620	329,142	115,312	47,281	82,543	1,453	10,723	981,074
1972–73	450,268	377,825	140,184	57,768	92,375	1,493	13,699	1,133,612
1973–74	529,021	424,951	165,189	70,019	115,351	1,651	18,113	1,324,295
1974–75	678,820	534,393	201,275	91,820	140,046	11,378	24,419	1,682,151
INVESTMENTS WITH LICENSED BOOKMAKERS(*a*)								
1970–71	314,658	196,166	147,931	60,728	39,778	48,825	5,232	813,318
1971–72	345,770	217,898	158,652	73,544	41,840	52,871	6,805	897,381
1972–73	377,222	228,756	181,858	82,746	44,282	58,220	8,093	981,177
1973–74	440,247	263,170	215,077	98,405	54,008	62,008	11,171	1,144,086
1974–75	549,941	338,977	229,795	124,384	60,082	60,650	15,873	1,379,703

(*a*) Estimated from taxes on betting with licensed bookmakers in all States except Australian Capital Territory.

PROBATES AND LETTERS OF ADMINISTRATION

The following table gives some particulars of the number and value of estates of deceased persons in each State for the latest year for which information is available. Owing to differences in legislation in the various States the figures are not entirely comparable.

PROBATES AND LETTERS OF ADMINISTRATION: STATES

		N.S.W. *1974–75(a)*	*Vic.* *1974*	*Qld* *1974–75*	*S.A.* *1974*	*W.A.* *1974–75*	*Tas.* *1974(b)*
Estates	No.	34,032	22,362	10,764	5,306	5,633	2,010
Gross value	$'000	n.a.	534,811	274,793	113,364	124,660	44,384
Net value	$'000	839,150	465,812	260,859	106,164	115,320	37,257

(*a*) Total estates of deceased persons assessed for death duty. (*b*) Estates dealt with by the Taxation Department.

AUSTRALIAN INDUSTRY DEVELOPMENT CORPORATION

The Australian Industry Development Corporation was established by the *Australian Industry Development Corporation Act* 1970 and commenced operations on 1 February 1971. Within the objectives and broad policy guidelines defined in the Act the Corporation operates as an independent commercial enterprise governed by its own Board of Directors.

The Corporation has a capital of $100 million, to be subscribed by the Commonwealth Government in instalments but the whole being available if required to meet obligations. The paid-up capital at 30 June 1975 was $50 million.

The central objectives of the Corporation are to promote the development of industries in Australia and support local participation in the ownership and control of industries and resources. Consistent with these objectives and the principle that A.I.D.C. must operate on a commercial basis and assist only in ventures which can demonstrate sound prospects, the Corporation provides finance, obtained by borrowing both in Australia and overseas, for Australian firms (including local firms with foreign partners) engaged in industries concerned with the manufacture, processing, treatment, transportation or distribution of goods, or the development or use of natural resources (including the recovery of minerals) or technology and activities that are connected with or incidental to those industries.

The Corporation's financial participation in a venture is governed by the prevailing terms and conditions under which it can itself obtain loan finance. The capital of the Corporation is provided as a base for its borrowings and is not directly used for assistance to industry projects.

A.I.D.C. provides development capital both for start-up situations and for going concerns. Although the greater part of its financings are loans, it also makes equity investments in industry. Where a company's capital needs can best be met by loan finance, A.I.D.C. does not seek an equity position. It aims to avoid involvement in the management of companies to which it provides financing.

Project investments approved since operations commenced totalled $265 million at 30 June 1975, and financings outstanding in 44 projects was $148 million.

CHAPTER 18

PUBLIC FINANCE

This chapter deals with the financial activities of the organisations which make up the three levels of government in the Australian political system—Federal, State and Local—and which collectively constitute the public sector. The chapter is organised into seven main groupings of topics. An account is given of the activities of each level of government, with particular emphasis being given to Federal authorities. Tables are then presented which bring together the transactions of all public authorities to highlight the role of the public sector as a whole in the Australian economy. Then follows a section on government borrowing activities at all levels; and a section which looks at some major groups of State authorities that have been created to provide specific services, such as roads, water supply, etc.

For further detailed information on the subjects covered by this chapter *see* the annual bulletins published by the ABS: *Australian National Accounts—National Income and Expenditure* (7.1); *Public Authority Finance—Federal Authorities* (5.12); *Public Authority Finance—State and Local Authorities* (5.43); *Public Authority Finance—Taxation* (5.30) and *Public Authority Finance—Estimates* (5.55). Current information in summarised form is given in *Quarterly Estimates of National Income and Expenditure* (7.5), and is also contained in the *Monthly Review of Business Statistics* (1.4), and the *Monthly Digest of Current Economic Statistics* (1.5).

Additional details of the transactions of public authorities engaged in particular fields of activity, such as defence, transport and communication, health and welfare, education, etc., may be found in other chapters of this Year Book.

COMMONWEALTH GOVERNMENT FINANCE

Financial provisions of the Constitution

The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth of Australia are contained in Sections 81 to 105A of the Commonwealth Constitution (*see* pages 16–19 of this Year Book). Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer from the States to the Commonwealth of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of other departments. Sections 87 and 96 deal with the financial relations between the Commonwealth and the States. The full text of the Financial Agreement of 1927 was given in Year Book No. 31, page 21; accounts of this Agreement as affected by subsequent Agreements were included in later issues of the Year Book up to No. 37 (*see pages* 685–90); details of the main provisions appeared in further issues of the Year Book up to No. 50 (*see* pages 952–3). Details of current provisions for financial assistance to the States are given on pages 571 to 577.

The *Audit Act* 1901 lays down the procedure which must be followed in accounting for the receipt and disbursement of public funds. The general administration of Commonwealth Government finances is the responsibility of the Commonwealth Government Treasurer.

Commonwealth Government Budget

The Commonwealth Government Budget records the transactions of those authorities of the Commonwealth Government whose receipts and payments are summarised in the statements of Treasury balances. In 1974–75 the change in cash balances was represented by the following—

	$'000
Cash receipts of the Consolidated Revenue Fund	15,391,119
plus cash receipts of Loan Fund	3,445,952
plus cash receipts of Trust Fund	6,822,485
Total	*25,659,556*
less cash payments from Consolidated Revenue Fund	15,391,119
less cash payments from Loan Fund	3,445,952
less cash payments from Trust Fund (including increase in investments of the Trust Fund)	7,482,441
Total	*26,319,512*
equals decrease in cash balances	659,956

Revenues from taxation and other sources are paid into the Consolidated Revenue Fund, from which the main expenditures are for defence, social services, payments to the States and general administration. The Trust Fund covers special transactions outside the ordinary operations of departmental expenditures, such as pension funds and moneys held for expenditure by the Commonwealth Government at some future time. The Loan Fund receives its funds from the sale of Commonwealth Government securities, and the expenditures from the Fund are made in accordance with the purpose of issue of each loan. The main disbursements from the Loan Fund are to the States by way of distribution of the proceeds of loans raised by the Commonwealth Government on their behalf and capital assistance grants, the remaining disbursements being mainly for Commonwealth Government purposes.

The receipts and outlay of the Budget for 1975–76 are set out in the table which follows, together with figures for the years 1971–72 to 1974–75. The national accounting presentation of the budget is shown in order to be consistent with other transactions figures given in this chapter.

It should be noted that some transactions undertaken by authorities covered by the Budget are not reflected in the change in cash balances, usually because they are not cash transactions or because a receipt and a payment are offset against each other so that only a net amount is included in published totals. The national accounting presentation of the Budget includes these additional transactions, further details of which may be found in the Appendix to the Supplement to the *Treasury Information Bulletin*, September 1974.

RECEIPTS AND OUTLAY OF THE COMMONWEALTH BUDGET

($ million)

(*Source:* Supplement to the *Treasury Information Bulletin*, August 1975)

	1971–72	*1972–73*	*1973–74*	*1974–75*	*1975–76 Budget Estimate*
Outlay—					
Net expenditure on goods and services—					
Current	2,148	2,337	2,697	3,476	4,230
Capital(*a*)	221	234	275	410	567
Total	2,369	2,571	2,972	3,886	4,796
Transfer payments—					
Cash benefits to persons	2,040	2,530	3,078	4,321	5,700
Grants to States and local government authorities	2,396	2,784	3,438	5,184	7,057
Interest paid	616	674	714	887	1,011
Transfers overseas	205	251	289	350	393
Subsidies	384	323	290	240	251
Grants for private capital purposes	40	54	62	102	173
Unfunded employee retirement benefits	. .	1	65	88	82
Purchases of existing assets	28	17	30	125	30
Total	5,710	6,633	7,965	11,296	14,697
Total expenditure	8,079	9,204	10,938	15,182	19,493
Net advances—					
States	590	668	748	1,225	1,413
Federal authorities	352	325	448	1,067	775
Other sectors	(*b*)29	(*b*)−4	97	357	234
Total	972	988	1,293	2,648	2,422
Total outlay	*9,050*	*10,192*	*12,230*	*17,831*	*21,915*
Receipts—					
Taxation—					
Indirect taxes	2,499	2,595	3,184	3,792	4,888
Income tax on companies	1,535	1,634	2,033	2,447	2,250
Income tax on persons	3,769	4,090	5,490	7,714	10,340
Estate and gift duties	76	73	76	80	92
Other direct taxes, fees, fines, etc.	60	66	68	23	10
Unfunded employee retirement contributions	. .	1	27	35	35
Less remissions	5	6	6	7	7
Total	7,934	8,453	10,873	14,084	17,608
Other receipts—					
Interest, rent and dividends	885	951	1,031	1,174	1,482
Public enterprises income	56	33	11	−12	2
Net sales of existing assets(*c*)	41	47	22	18	26
Total	982	1,030	1,065	1,180	1,509
Total receipts	*8,916*	*9,483*	*11,938*	*15,264*	*19,117*
Deficit	**134**	**709**	**293**	**2,567**	**2,798**

(*a*) Expenditure on new fixed assets *plus* increase in stocks *less* sales of previously rented houses. (*b*) Includes net advances to the Australian Wheat Board which in the past has been treated as financing transactions and thus formed part of the deficit. (*c*) Excludes sales of previously rented houses.

Financing of the Commonwealth Government deficit

The deficit shown in the last line of the preceding table represents the net excess of Budget outlay over receipts. In other words, the estimated deficit shown for 1975–76 represents the Commonwealth Government budget sector's 'financing requirements'. Most such transactions involve the issue, repurchase, redemption or acquisition of Commonwealth Government securities, but some involve or are represented by changes in other assets or liabilities of the Commonwealth Government.

Specifically the deficit is financed as follows.

Net sales of Commonwealth Government securities (new issues, *less* redemptions, *less* net purchases from Commonwealth Government balances in the Trust Fund);

less net purchases of other investments from Commonwealth Government balances in the Trust Fund

plus minor items of indebtedness (such as borrowing by Australian Capital Territory and Northern Territory housing trust accounts)

less net additions to cash balances, and funds provided for the International Monetary Fund and the Australian Wheat Board.

The following table summarises the financing transactions of the Commonwealth Government budget sector for recent years. Further details of Commonwealth Government loan transactions and of government securities on issue on account of the Commonwealth Government and the States are given in a later section of this chapter.

COMMONWEALTH BUDGET FINANCING TRANSACTIONS
($ million)
(*Source:* Statement No. 6 attached to the *Budget Speech*, 1975–76)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Overseas—					
Credit arrangements for defence purchases in the United States of America	64	46	51	..	..
Less—repayments	57	63	59	54	45
Net drawings	7	−16	−8	−54	−45
Aircraft loans for Qantas and Australian National Airlines Commission	47	85	31	16	59
Less—repayments	28	33	38	27	25
Net drawings	20	52	−7	−10	34
Other overseas loan proceeds	15	26	28	..	107
Less—redemptions, etc.	87	109	78	66	95
Net proceeds	−72	−83	−50	−66	12
Total net proceeds overseas	*−46*	*−47*	*−66*	*−130*	*2*
Funds provided for International Monetary Fund	−37	..	..	..	..
Australia—					
Proceeds of loans raised in Australia	770	917	971	1,651	929
Less—redemptions, etc.	566	197	232	837	640
Net proceeds of loans raised in Australia	205	720	739	814	289
Net change in Treasury Notes on issue	18	−10	165	−38	1,689
Total net proceeds Australia	*222*	*711*	*904*	*776*	*1,978*
Other financing transactions	27	38	46	127	−73
Residual Financing—					
Net increase in Treasury Bills on issue	..	..	..	..	..
Use of cash balances	−157	−567	−175	−480	660
Total residual financing	*−157*	*−567*	*−175*	*−480*	*660*
Total Australian financing transactions	*92*	*181*	*775*	*423*	*2,565*
Total financing transactions	**10**	**134**	**709**	**293**	**2,567**

FEDERAL AUTHORITIES

In addition to the group of authorites of the Commonwealth Government whose transactions are covered by the Budget (i.e. itemised in the Consolidated Revenue Fund, the Loan Fund, or recorded in a Trust Fund), there are a number of organisations owned or controlled by the Commonwealth Government whose transactions do not, for the most part, pass through the Public Account. This category consists largely of public enterprises such as the Australian Postal Commission, Australian Telecommunications Commission, Overseas Telecommunications Commission, Qantas, Trans-Australia Airlines, the Australian Coastal Shipping Commission, the Snowy Mountains Hydro-electric Authority, the Reserve Bank and the Commonwealth Banking Corporation. Public enterprises, it should be noted, are bodies which aim at covering the bulk of their expenses by revenue either from sales of goods and services (trading enterprises), or by charges for services and net interest receipts (financial enterprises). As well as these enterprises, there are other public authorities which record most of their transactions outside the Public Account but have only minor independent sources of revenue, and are financed almost entirely from funds voted to them each year from the Consolidated Revenue Fund. In order that the national accounting presentation may indicate as completely as possible the direct effect of the budget on demand, appropriations to this last group of authorities are treated as final expenditure in the Budget. Authorities in this category include the Australian Broadcasting Commission, Australian National University, National Capital Development Commission, and the Australian Atomic Energy Commission.

The transactions of Commonwealth Government bodies not covered by the Budget may be brought together and consolidated with the transactions recorded in the Budget to yield figures of the transactions of all Federal authorities. The remaining tables in this section have been prepared on that basis.

Public financial enterprises have been omitted from the consolidated accounts presented here largely on the ground that combining the income and outlay and capital financing transactions of the Reserve Bank, the publicly owned trading and savings banks, government insurance offices and other public financial institutions with the equivalent transactions of public trading enterprises and general government seems to provide a less meaningful account of public sector activity. For example, omission of the borrowing and lending activities of the government banks and the Reserve Bank allows attention to be centred on the borrowing and lending activities of general government and public trading enterprises, which are quite different in nature and economic effect from the financing activities of the banking system. However, the expenditure on new fixed assets of public financial enterprises is shown in the table on page 567 to provide a measure of the gross fixed capital formation of all publicly owned and/or controlled organisations.

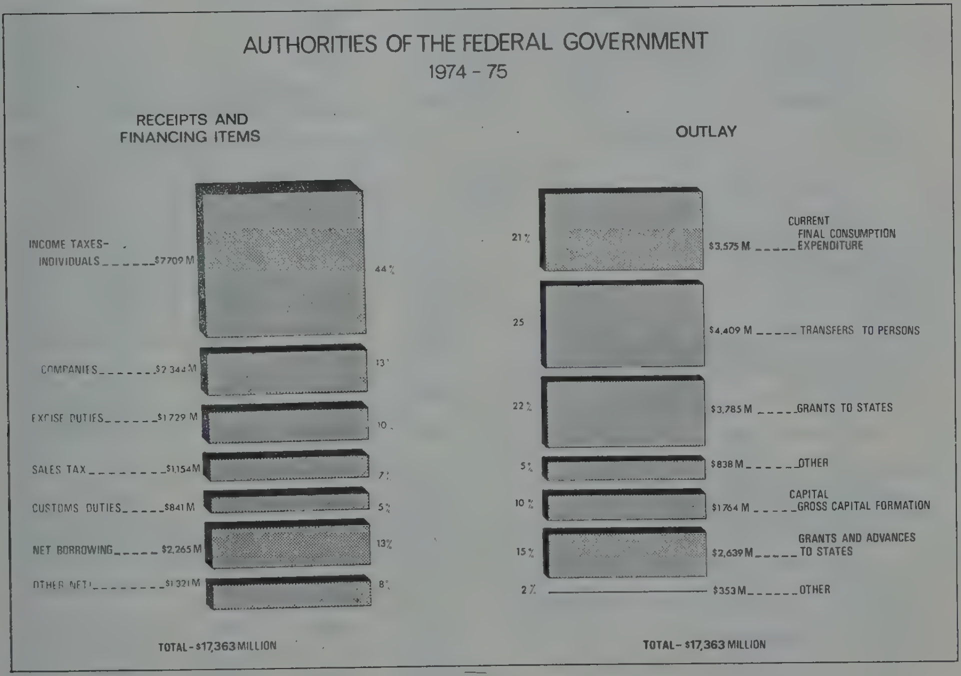


PLATE 42

Summary of receipts and outlay

The receipts and outlay of all federal authorities for the latest five-year period are given in the following table.

FEDERAL AUTHORITIES(*a*): RECEIPTS AND OUTLAY

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Current receipts—					
Taxes, fees, fines, etc.	7,182	7,938	8,470	10,917	14,212
Income from public enterprises	232	306	308	285	248
Interest, etc., received	61	62	77	87	87
Total current receipts	*7,475*	*8,307*	*8,855*	*11,289*	*14,548*
Capital receipts—					
Depreciation allowances	192	207	230	255	279
Net sale of securities—					
Treasury bills and notes	18	−10	165	−38	1,689
Commonwealth government securities	260	617	666	801	554
Public corporation securities	1	1	27	26	22
Net receipts of private trust funds	82	102	116	−90	84
Reduction in securities holdings	−166	−31	−89	−72	−518
Other funds available (including errors and omissions)	16	20	37	264	126
Total capital receipts	*402*	*905*	*1,151*	*1,147*	*2,236*
Reduction in cash and bank balances	−106	−583	−265	−527	580
Total receipts	**7,772**	**8,630**	**9,741**	**11,909**	**17,363**
OUTLAY					
Current outlay—					
Final consumption expenditure	1,971	2,175	2,373	2,743	3,575
Interest, etc., paid	13	−14	15	6	108
Transfers to persons	1,759	2,041	2,533	3,142	4,409
Subsidies	260	377	323	300	284
Transfers overseas	184	205	252	288	349
Grants for private capital purposes	35	40	54	63	97
Grants to States and local government authorities	1,672	1,769	2,077	2,538	3,785
Total current outlay	*5,894*	*6,595*	*7,626*	*9,081*	*12,608*
Capital outlay—					
Expenditure on new fixed assets	694	838	808	1,000	1,354
Expenditure on existing assets	−9	−5	−18	18	111
Increase in stocks	52	−25	−45	38	314
Grants to States and local government authorities	555	627	707	900	1,414
Advances to States and local government authorities	523	590	668	748	1,225
Advances to other sectors	64	9	−4	123	338
Total capital outlay	*1,878*	*2,035*	*2,115*	*2,828*	*4,755*
Total outlay	**7,772**	**8,630**	**9,741**	**11,909**	**17,363**

(*a*) Excludes financial enterprises.

Outlay classified by economic type and purpose

In the following two tables the outlay of all federal authorities is shown classified by economic type and purpose. The table on this page presents for 1974–75 the outlay according to purpose, classified by economic type, showing the Government's own demand for goods and services and the redistributive effect of its outlay.

FEDERAL AUTHORITIES: OUTLAY, CLASSIFIED BY ECONOMIC TYPE AND PURPOSE, 1974-75

($ million)

	Economic type					
		Gross capital formation		*Transfer payments*		
Purpose	*Final consumption expenditure*	*Expenditure on new fixed assets*	*Other(a)*	*Interest*	*Transfers to persons(b)*	*Subsidies*
General public services—						
General administration, n.e.c.	534	59	17	..	2	..
External affairs	85	16	..	..	..	..
Law, order and public safety	76	7	1	..	..	..
General research	110	21	..	..	1	..
Total general public services	*805*	*102*	*18*	..	*2*	..
Defence	1,444	..	35	..	86	..
Education	172	45	..	..	123	..
Health	304	40	2	..	817	2
Social security and welfare	171	9	..	..	3,355	..
Housing and community amenities	51	94	20	..	..	..
Recreation and related cultural services	181	31	7	..	..	..
Economic services—						
General administration, regulation and research	172	4	1	..	20	39
Agriculture, forestry and fishing	101	13	301	..	..	69
Mining, manufacturing and construction	18	7	7	..	..	170
Electricity and water supply	..	26	..	..	..	..
Transport and communication	94	974	33	..	..	2
Other economic services	19	2	..	..	..	2
Total economic services	*403*	*1,027*	*342*	..	*20*	*282*
Other purposes—						
General purpose inter-authority transfers	..	..	..	..	..	..
Natural disaster relief	44	6	1	..	5	..
Interest	..	..	..	108	..	..
Total	**3,575**	**1,354**	**425**	**108**	**4,409**	**284**

(*a*) Includes increase in stocks and (net) expenditure on land and existing assets. (*b*) Includes cash benefits to persons and unfunded employee retirement benefits.

FEDERAL AUTHORITIES: OUTLAY, CLASSIFIED BY ECONOMIC TYPE AND PURPOSE, 1974–75—*continued*

($ million)

	Economic type					
	Transfer payments			*Net advances*		
Purpose	*Transfers overseas*	*Grants for private capital purposes*	*Grants to States and local government authorities*	*To States and local government authorities*	*To other sectors*	*Total*
General public services—						
General administration, n.e.c.	..	..	..	..	..	612
External affairs	329	..	..	..	24	454
Law, order and public safety	..	..	1	..	..	85
General research	..	..	7	..	..	139
Total general public services	*330*	..	*9*	..	*24*	*1,290*
Defence	18	..	..	26	..	1,610
Education	..	8	1,329	..	..	1,676
Health	..	4	108	..	..	1,277
Social security and welfare	..	55	120	..	3	3,713
Housing and community amenities	..	29	80	546	212	1,032
Recreation and related cultural services	..	..	13	..	1	233
Economic services—						
General administration, regulation and research	..	1	5	..	..	242
Agriculture, forestry and fishing	..	..	43	39	..	567
Mining, manufacturing and construction	1	..	..	..	4	206
Electricity and water supply	..	..	..	39	..	65
Transport and communication	..	..	424	−5	12	1,534
Other economic services	..	..	1	..	80	104
Total economic services	*1*	*1*	*472*	*73*	*96*	*2,717*
Other purposes—						
General purpose inter-authority transfers	..	..	3,019	582	..	3,602
Natural disaster relief	..	..	49	−2	3	106
Interest	..	..	..	..	..	108
Total	**349**	**97**	**5,199**	**1,225**	**338**	**17,363**

FEDERAL AUTHORITIES: OUTLAY, CLASSIFIED BY PURPOSE
($ million)

Purpose	1970–71	1971–72	1972–73	1973–74	1974–75
General public services—					
General administration, n.e.c.	254.1	321.6	361.1	460.0	611.9
External affairs	265.1	263.4	305.7	357.9	454.5
Law, order and public safety	26.3	32.7	40.1	54.7	84.6
General research	74.8	80.7	89.9	112.0	138.6
Total general public services	*620.3*	*698.6*	*796.9*	*984.8*	*1,289.9*
Defence	1,081.2	1,127.2	1,206.4	1,306.0	1,610.1
Education—					
General administration, regulation and research	7.1	8.4	14.7	14.5	21.4
Transportation of students	0.8	0.8	1.0	1.2	1.5
Primary and secondary education	84.4	99.4	125.1	240.2	546.3
Vocational training	14.6	9.8	18.3	36.6	55.3
University education	137.0	159.3	190.4	330.1	553.6
Other higher education	41.7	55.7	71.9	199.6	407.4
Other education programs	13.7	15.6	22.7	40.0	90.9
Total education	*299.4*	*348.9*	*444.2*	*862.2*	*1,676.4*
Health—					
General administration, regulation and research	23.1	28.5	25.8	29.7	58.9
Hospital and clinical services	233.4	296.4	344.5	404.8	578.4
Other health services	303.0	361.3	409.9	507.5	639.9
Total health	*559.5*	*686.3*	*780.3*	*942.1*	*1,277.2*
Social security and welfare—					
General administration regulation and research	25.9	29.3	37.7	60.4	83.0
Care of and assistance to—					
Aged persons	610.1	713.8	926.3	1 186.6	1 683.1
Incapacitated and handicapped persons	126.4	148.1	197.0	242.3	337.9
Unemployed and sick persons	23.5	71.7	181.4	118.7	477.0
Ex-servicemen	256.1	281.7	320.1	383.6	514.3
Widowed and deserted spouses	94.2	110.5	150.3	188.6	248.3
Families and children	207.4	225.8	262.9	275.6	312.4
Other social security and welfare services	36.1	17.2	28.8	36.5	57.1
Total social security, etc.	*1,379.6*	*1,598.1*	*2,104.6*	*2,492.3*	*3,713.1*
Housing and community amenities—					
Housing	195.7	54.4	52.3	331.5	655.7
Community and regional development	15.2	25.9	24.2	94.6	231.7
Protection of the environment	3.8	5.6	8.7	42.0	143.7
Community amenities, n.e.c.	0.1	..	0.3	0.4	0.3
Total housing, etc.	*214.7*	*85.8*	*85.5*	*468.5*	*1,031.5*
Recreation and related cultural services—					
Cultural facilities	6.8	8.8	10.3	18.1	25.1
Support of the creative and performing arts	3.6	5.6	7.3	14.3	21.4
Broadcasting services and film production	72.1	82.1	89.0	112.8	153.0
Recreational facilities and services	6.0	6.2	7.4	10.6	19.2
Other programs	0.4	0.2	0.4	1.6	14.5
Total recreation, etc.	*88.9*	*102.8*	*114.4*	*157.4*	*233.0*
Economic services—					
General administration, regulation and research	133.8	139.5	135.6	162.8	242.4
Agriculture forestry and fishing	260.2	312.3	237.9	336.2	566.7
Mining, manufacturing and construction	67.0	106.9	134.0	140.4	205.9
Electricity and water supply	46.1	33.4	40.8	52.2	64.7
Transport and communication	831.5	975.6	963.3	1,196.8	1,533.5
Other economic services	64.0	54.7	58.9	37.9	104.0
Total economic services	*1,402.7*	*1,622.6*	*1,570.6*	*1,926.3*	*2,717.1*
Other purposes—					
General purpose inter-authority transfers	2,097.8	2,370.4	2,628.4	2,740.2	3,601.4
Natural disaster relief	15.1	2.4	−5.3	22.6	106.3
Interest	12.7	−13.6	15.0	6.4	108.4
Other	..	..	..	..	..
Total other purposes	*2,125.6*	*2,359.1*	*2,638.0*	*2,769.3*	*3,816.2*
Total outlay, all purposes	**7,771.9**	**8,629.5**	**9,741.0**	**11,908.9**	**17,363.3**
Of which—					
Current outlay	5,893.8	6,594.9	7,625.6	9,080.6	12,608.2
Capital outlay	1,878.1	2,034.7	2,115.4	2,828.2	4,755.1

Main components of outlay

The following tables give further details of the main components of the outlay of federal authorities i.e. final consumption expenditure, expenditure on new fixed assets, cash benefits, subsidies and payments to the States. More detailed information relating to outlay under specific function headings such as defence, education, health and welfare, may be found in the relevant chapters of this Year Book.

Final consumption expenditure and expenditure on new fixed assets

Final consumption expenditure consists of current expenditure on goods and services by public authorities, other than those classified as enterprises, *less* any charges made for goods and services which they themselves provide. Expenditure on new fixed assets consists of purchases of new durable assets less sales of previously rented dwellings. Purchases of defence equipment are treated as current expenditure and all expenditure on road systems and ancillary facilities is treated as capital. The following tables show dissections by purpose of final consumption expenditure and expenditure on new fixed assets for the five years ended 1974–75.

FEDERAL AUTHORITIES, FINAL CONSUMPTION EXPENDITURE CLASSIFIED BY PURPOSE

($ million)

Purpose	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
General administration	238	285	323	415	534
External affairs	40	45	50	59	85
Law, order and public safety	24	30	37	49	76
General research	58	66	74	90	110
Total general public services	*360*	*426*	*485*	*613*	*805*
Defence	1,062	1,127	1,178	1,222	1,444
Education	55	64	81	112	172
Health	116	138	157	207	304
Social security and welfare	50	61	77	104	171
Housing and community amenities	9	11	16	32	51
Recreation and related cultural services	77	87	99	135	181
Economic services—					
General administration, regulation and research	106	107	105	127	172
Agriculture, forestry, fishing	66	72	82	83	101
Mining, manufacturing and construction	10	11	12	14	18
Transport and communication	46	56	64	78	94
Other	14	16	16	15	19
Total economic services	*242*	*261*	*279*	*317*	*403*
Other purposes	..	..	..	1	44
Grand total	**1,971**	**2,175**	**2,373**	**2,743**	**3,575**

FEDERAL AUTHORITIES: EXPENDITURE ON NEW FIXED ASSETS, CLASSIFIED BY PURPOSE

I. GENERAL GOVERNMENT

($ million)

Purpose	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
General administration	18.6	22.6	35.9	43.4	57.2
External affairs	2.3	3.5	15.4	12.3	15.9
Law, order and public safety	2.0	2.5	2.9	3.1	7.2
General research	13.0	10.0	9.3	15.1	20.6
Total general public services	*35.8*	*38.7*	*63.6*	*73.9*	*100.7*
Education—					
General administration, regulation and reseach	0.2	0.3	5.7	0.2	0.2
Transportation of students	..	..	..	..	..
Primary and secondary education	9.3	13.1	8.9	11.1	19.6
Vocational training	..	..	2.4	4.1	3.3
University education	8.2	7.2	7.8	6.9	8.4
Other higher education	3.4	4.0	2.9	5.7	5.6
Other education programs	0.9	0.4	2.4	4.2	7.9
Total education	*22.0*	*25.0*	*30.1*	*32.1*	*45.1*

EXPENDITURE ON NEW FIXED ASSETS, CLASSIFIED BY PURPOSE—*continued*

I. GENERAL GOVERNMENT—*continued*

($ million)

Purpose	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Health—					
General administration, regulation and research	0.5	0.7	1.0	1.2	5.0
Hospital and clinical services	9.4	19.7	16.3	14.5	26.6
Other health services	6.3	1.2	2.1	6.3	8.7
Total health	*16.1*	*21.5*	*19.4*	*22.0*	*40.3*
Social security and welfare—					
General administration, regulation and research	3.5	2.1	1.5	9.5	5.9
Care of and assistance to—					
Aged persons	..	..	..	..	0.5
Incapacitated and handicapped persons	0.1	..	0.1	0.3	1.4
Unemployed and sick persons	..	..	..	..	..
Ex-servicemen	2.2	0.2	0.3	0.6	0.7
Widowed and deserted spouses	..	..	..	..	..
Families and children	..	..	..	..	..
Other social security and welfare programs	0.4	0.3	0.6	0.3	0.6
Total social security, etc.	*6.2*	*2.6*	*2.5*	*10.7*	*9.1*
Housing and community amenities—					
Housing	3.1	−1.2	−0.6	1.9	14.4
Community and regional development	16.4	22.3	25.9	34.4	50.1
Protection of the environment	..	0.7	1.2	2.6	4.8
Community amenities, n.e.c.	0.3	..	..	..	0.1
Total housing, etc.	*19.9*	*21.8*	*26.4*	*38.9*	*69.4*
Recreation and related cultural services—					
Cultural facilities	0.9	1.8	1.4	3.7	5.4
Support of the creative and performing arts	..	..	..	..	..
Broadcasting services and film production	9.5	11.7	10.2	15.4	22.8
Recreational facilities and services	1.5	1.4	1.9	1.3	2.1
Other programs	0.2	0.1	0.1	0.2	0.5
Total recreation, etc.	*12.2*	*15.0*	*13.6*	*20.7*	*30.8*
Economic services—					
General administration, regulation and research	5.3	5.8	4.6	3.3	3.6
Agriculture, forestry, fishing	2.2	4.1	16.4	9.3	13.3
Mining, manufacturing and construction	0.6	0.6	0.5	0.7	2.0
Electricity and water supply	..	..	..	..	..
Transport and communication	72.0	56.9	45.2	43.6	56.7
Other economic services	0.2	0.2	0.1	0.1	..
Total economic services	*80.4*	*67.6*	*66.8*	*57.1*	*75.7*
Other purposes	..	..	..	..	6.5
Total general government	*192.6*	*192.3*	*222.4*	*255.5*	*377.5*

II. PUBLIC ENTERPRISES

($ million)

Purpose	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Public trading enterprises—					
General public services	0.2	0.5	1.6	0.7	1.5
Housing and community amenities—Housing	10.0	7.2	3.9	0.5	8.6
Sewerage and drainage	2.3	3.1	5.4	8.0	15.6
Recreation and related cultural services—Cultural facilities	..	..	..	..	..
Economic services—					
Technical services, n.e.c.	..	0.4	0.4	0.4	0.6
Manufacturing activities	1.2	1.5	1.8	1.6	4.8
Electricity, water supply	43.2	31.5	26.9	28.8	26.1
Transport and communication—					
Air transport	46.4	138.7	41.8	69.5	71.0
Rail transport	13.3	17.1	10.6	7.5	13.4
Sea transport	6.6	16.0	20.9	10.5	55.2
Urban transit systems	2.7	2.6	2.0	2.7	3.5
Pipelines	..	..	10.4	56.0	56.6
Communications services	374.4	426.4	460.1	558.8	717.7
Total	*443.4*	*600.9*	*545.7*	*704.9*	*917.4*
Other economic services	1.1	1.0	0.3	0.1	2.0
Total public trading enterprises	*501.3*	*646.0*	*585.9*	*745.0*	*976.7*
Public financial enterprises	14.4	23.7	28.3	21.8	31.0
Total public enterprises	*515.7*	*669.6*	*614.2*	*766.8*	*1,007.7*

Cash benefits to persons

Total payments of cash benefits to persons during the latest five years are shown in the next table. Further information relating to items in this table is given in appropriate chapters of this Year Book.

FEDERAL AUTHORITIES: CASH BENEFITS TO PERSONS

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
General research—					
Queen Elizabeth fellowships	226	282	330	451	473
Defence—					
Special pensions to ex-servicemen	...	5	2	2	..
Education—					
Primary and secondary education—					
Student assistance	6,791	6,924	8,663	11,895	8,599
Australian Capital Territory and Northern Territory scholarships and allowances	209	193	183	53	46
Assistance to isolated children	..	..	2,588	8,188	9,539
Total	7,000	7,117	11,434	20,136	18,184
Vocational training—					
Student assistance	1,096	1,048	1,008	516	128
University education—					
Australian National University scholarships	1,346	1,295	1,437	1,178	1,326
Student assistance—					
post-graduate	5,209	5,888	6,671	7,461	8,143
under-graduate	22,519	28,127	36,827	29,564	38,862
Australian Agricultural Council scholarships	51	54	59	60	71
Wool research studentships	368	334	267	236	234
Forestry scholarships	67	69	76	80	89
Assistance to Vietnamese and Cambodian students	..	..	..	..	53
Other	19	12	11	18	84
Total	29,579	35,779	45,348	38,597	48,862
Other higher education—					
Student assistance	2,793	3,552	5,397	20,558	37,480
Teaching scholarships at Canberra College of Advanced Education	12	29	41	25	..
Commonwealth Teaching Service scholarships	..	109	364	697	1,079
Pre-school teaching scholarships	..	..	1,288	1,755	2,648
Non government institutions-fees	..	..	..	..	1,615
Other	..	..	..	..	12
Total	2,805	3,690	7,090	23,035	42,834
Other education programs—					
Aboriginal study grants	326	474	631	905	1,403
Aboriginal secondary grants	2,201	2,536	4,267	6,093	7,197
Soldiers' children education scheme	3,407	3,625	3,573	3,460	3,682
Adult secondary education assistance	..	..	..	..	759
Other	5	12	77	14	48
Total	5,939	6,647	8,548	10,472	13,089
Total education	*46,419*	*54,281*	*73,428*	*92,756*	*123,097*
Health—					
Hospital and clinical services—					
Hospital benefits, n.e.c.	49,807	67,305	82,270	89,488	161,593
Hospital benefits for pensioners	23,555	24,065	23,768	24,295	25,187
Nursing home benefits	49,477	70,593	92,836	112,740	161,593
Tuberculosis campaign—allowances	659	630	780	740	754
Rehabilitation of ex-servicemen	..	..	134	150	201
Other	..	..	..	1	..
Total	123,498	162,593	199,788	227,414	303,885
Other health services—					
Medical benefits for pensioners	19,904	27,804	30,822	35,417	47,800
Medical benefits, n.e.c.	95,604	132,574	160,238	163,449	195,818
Pharmaceutical benefits for pensioners	45,181	52,005	58,139	66,803	80,699
Pharmaceutical benefits, n.e.c.	115,094	121,263	119,493	151,493	181,643
Milk for school children	10,199	11,894	11,781	8,118	58
Domiciliary care	..	..	1,022	6,309	7,112
Total	285,982	345,540	381,495	431,589	513,130
Total health	*409,480*	*508,133*	*581,283*	*659,003*	*817,015*

FEDERAL AUTHORITIES: CASH BENEFITS TO PERSONS—*continued*

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Social security and welfare—					
Assistance to aged persons—					
Age pensions	582,889	680,322	887,750	1,146,387	1,612,451
Delivered meals	218	226	398	958	968
Personal care	1,592	1,830	3,273	4,949	7,651
Telephone concessions	2,955	3,806	4,172	5,394	7,053
Total	587,654	686,184	895,593	1,157,688	1,628,123
Assistance to incapacitated and handicapped persons—					
Invalid pensions	119,387	138,194	184,699	226,022	306,477
Sheltered employment allowances	590	742	1,161	1,418	3,075
Handicapped children's benefits	456	438	429	582	2,469
Rehabilitation services	3,107	3,945	4,658	6,203	9,329
Total	123,540	143,319	190,947	234,225	321,350
Assistance to unemployed and sick persons—					
Unemployment benefits	10,795	25,997	46,553	58,246	251,740
Sickness benefits	10,262	15,906	26,610	41,407	62,833
Special benefits	2,420	2,851	4,368	6,983	10,992
Structural adjustment assistance	..	..	..	..	51,040
Other	..	..	80	44	20
Total	23,477	44,754	77,611	106,681	376,625
Assistance to ex-servicemen—					
War and service pensions and allowances	234,979	260 150	297,304	355,803	469,908
Other benefits	3,823	4,058	3,720	4,025	4,043
Total	238,802	264,208	301,024	359,828	473,951
Assistance to widowed and deserted spouses—					
Widows' pensions	90,514	104,627	140,505	180,957	241,389
Assistance to families and children—					
Child endowment	198,442	216,581	253,860	225,360	224,848
Maternity allowances	8,554	8,617	7,970	7,782	7,506
Supporting mothers' benefits	..	..	..	40,586	76,092
Orphans' pensions	..	..	..	458	1,381
Total	206,996	225,198	261,830	274,186	309,827
Other social security and welfare programs—					
Funeral benefits	1,653	1,583	1,579	1,578	1,641
Telephone rental concessions n.e.c.	662	802	863	1,024	1,299
Emergency assistance to wool-growers	21,327	187	..	..	..
Compassionate allowances	91	98	104	104	95
Assistance to homeless persons	..	..	..	..	275
Other	137	132	134	378	505
Total	23,870	2,802	2,680	3,084	3,815
Total social security and welfare	*1,294,853*	*1,471,092*	*1,870,190*	*2,316,648*	*3,355,080*
Economic services—					
General administration, regulation and research—					
Hostel tariffs of unemployed migrants	729	602	252	290	289
Maintenance of migrant families	4,927	4,298	4,385	4,425	6,029
Stevedoring industry—attendance money, etc.	1,140	1,207	1,362	1,606	2,126
Widows' training scheme	539	656	516	875	863
Tertiary education assistance to ex-servicemen	565	725	814	820	421
National employment training scheme	..	..	..	..	10,590
Other	..	9	10	12	3
Total	7,900	7,497	7,339	8,028	20,321
Agriculture, forestry, fishing—					
War service land settlement—rent remissions, etc.	51	30	50	13	12
Allowances to agricultural trainees	..	..	..	66	49
Total	51	30	50	79	61
Mining, manufacturing and construction—					
Joint coal board—Welfare fund	36	43	40	36	5
Total economic services	*7,987*	*7,570*	*7,429*	*8,143*	*20,387*
Other purposes	..	..	..	..	5,217
Total	**1,758,965**	**2,041,363**	**2,532,662**	**3,077,002**	**4,321,269**

Subsidies

The following table shows details of Commonwealth Government outlay on subsidies and bounties. Other assistance to primary producers is included in, for example, tables relating to cash benefits and payments to the States, and additional information is given in Chapter 22, Rural Industry.

FEDERAL AUTHORITIES: SUBSIDIES
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–7*
Departmental cafeteria compensation	..	..	..	189	179
Serum laboratories	..	479	607	681	1,542
N.T. Housing Commission assistance	..	..	113	76	64
Canberra Theatre Trust subsidy	26	28	38	67	120
Economic services—					
Assistance to employers—					
Stevedoring industry assistance	12,289	15,709	12,792	14,480	22,330
Apprenticeship training	570	788	1,209	6,130	16,551
Other	..	..	..	132	..
Total	*12,859*	*16,497*	*14,001*	*20,741*	*38,88*
Assistance to agricultural and pastoral enterprises—					
Dairy products subsidy	41,500	39,882	28,500	18,000	9,000
Wheat prices stabilisation payments	29,008	58,357	41,371	12,360	..
Phosphate fertilisers bounty	40,815	45,795	56,568	66,962	29,508
Nitrogenous fertilisers bounty	9,716	9,757	13,138	13,573	13,983
Poultry industry assistance	12,505	13,222	12,910	11,522	12,735
Devaluation compensation	21,000	7,204	175	..	..
Wool marketing assistance	2,900	4,100	2,481	404	..
Deficiency payments for wool	..	52,671	−1,640	−11	..
Apple and pear stabilisation payments	..	2,584	3,119	2,758	3,119
Other	7,161	3,627	3,695	3,631	648
Total	*164,605*	*237,200*	*160,317*	*129,199*	*68,99*
Assistance to mining enterprises—					
Oil search subsidy	9,643	7,536	8,084	10,000	5,858
Gold mining industry assistance	2,828	1,712	248	17	..
Other	568	1,205	273	1,470	84
Total	*13,039*	*10,453*	*8,605*	*11,487*	*5,94*
Assistance to maniufacturing enterprises—					
Agricultural tractor bounty	2,750	3,160	2,800	3,707	4,442
Book bounty	3,217	3,181	2,984	3,409	5,936
Industrial research and development grants	16,250	13,000	14,000	15,000	17,500
Ship construction subsidy	18,646	13,396	30,633	20,925	31,153
Export incentive grants	(a)	5,674	58,340	68,142	93,151
Structural adjustment assistance	..	..	..	109	5,304
Refrigeration compressors bounty	..	..	..	..	3,877
Other	2,276	1,083	2,405	1,180	2,600
Total	*43,139*	*84,494*	*111,163*	*112,472*	*163,96*
Assistance to air transport services	2,000	1,900	2,000	1,870	9
Assistance to sea transport services	285	217	24	1,024	1,0
Other assistance to enterprises—					
Petrol prices equalisation	21,737	23,064	23,305	19,336	1,708
Northern Territory petrol prices equalisation	2,092	2,165	2,393	2,483	626
Total	*23,829*	*25,229*	*25,698*	*21,819*	*2,3*
Natural disaster relief—					
N.T. drought and flood relief freight concessions and subsidies	149	210	27	69	
Total	**259,931**	**376,708**	**322,594**	**299,695**	**284,03**

(a) Offset against gross receipts of pay-roll tax prior to 1971–72.

Grants and advances to the States

Commonwealth Government financial assistance to the States takes two main forms: (i) grants for general and specific purposes, and (ii) assistance for developmental and other specific purposes in the form of repayable advances. Some information about the more important or most recent of these forms of financial assistance is given on pages 571–579, but for more complete information reference should be made to the Commonwealth Government Budget paper *Payments to or for the States and Local Government Authorities.* Further information also appears in chapters of this Year Book dealing with the specific function which the payments are designed to serve.

Grants to the States

The following tables show details of grants to the States for general and specific purposes. More detailed figures appear in *Public Authority Finance: Federal Authorities.*

FEDERAL AUTHORITIES: GRANTS TO THE STATES, 1974–75
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
FOR CURRENT PURPOSES							
General public services	3,024	1,951	1,041	1,661	659	309	8,646
Defence	188	..	114	..	..	23	325
Education	317,169	276,414	117,541	88,971	83,844	26,717	910,657
Health	16,496	9,393	7,401	5,116	6,520	2,357	47,281
Social security and welfare	18,305	17,397	10,026	6,478	7,394	2,222	61,823
Housing and community amenities	3,053	2,266	985	1,479	1,275	436	9,494
Recreation and related cultural services	9	29	6	8	11	7	70
Economic services	6,960	4,653	4,397	1,317	2,175	2,752	22,252
Other purposes—							
Financial assistance grants	737,522	548,405	414,446	261,737	279,830	131,871	2,373,811
Special grants	..	..	24,750	39,934	..	..	64,684
Special revenue assistance	18,641	13,861	10,475	16,616	7,073	8,333	75,000
Payments under Financial Agreement—							
Interest on States' debt	5,835	4,254	2,192	1,525	947	534	15,287
Sinking fund on States' debt	10,079	7,525	4,012	4,072	2,976	2,141	30,805
Debt charges assistance	18,999	13,914	7,627	7,478	5,528	3,975	57,520
Natural disaster relief	612	284	84	..	..	..	980
Local government (Grants Commission)	21,359	14,630	8,954	4,774	4,959	1,669	56,345
Total other purposes	*813,047*	*602,873*	*472,540*	*336,136*	*301,313*	*148,523*	*2,674,432*
Total grants for current purposes	**1,178,251**	**914,976**	**614,051**	**441,166**	**403,191**	**183,346**	**3,734,981**
FOR CAPITAL PURPOSES							
Education	146,584	118,431	59,461	44,832	34,170	11,994	415,473
Health	17,257	12,795	9,663	7,352	11,601	2,067	60,734
Social security and welfare	3,432	1,493	1,467	556	693	154	7,795
Housing and community amenities	23,453	17,623	13,284	8,592	6,090	1,082	70,125
Recreation and related cultural services	2,829	2,281	1,557	1,601	2,884	1,471	12,623
Economic services—							
General administration, regulation and research	..	..	163	17	..	..	180
Soil and water resources management	4,355	1,610	6,106	1,285	1,702	135	15,193
Assistance to agricultural and pastoral activities	3,250	2,901	1,352	705	1,125	984	10,316
Rail transport	..	..	..	672	62	..	734
Sea transport	2,018	..	..	..	..	..	2,018
Road transport	115,792	75,951	75,651	31,888	50,449	24,129	373,860
Urban public transport	14,863	18,867	2,126	6,215	2,829	359	45,259
Other	828	266	149	180	37	209	1,667
Total economic services	*141,106*	*99,595*	*85,547*	*40,962*	*56,204*	*25,816*	*449,227*
Other purposes—							
Capital assistance	107,313	87,370	46,112	46,927	32,179	25,977	345,878
Natural disaster relief	13,239	9,107	25,551	114	..	..	48,011
Total grants for capital purposes	**455,213**	**348,695**	**242,642**	**150,936**	**143,821**	**68,561**	**1,409,868**
TOTAL GRANTS							
Total grants to the States	**1,633,464**	**1,263,671**	**856,693**	**592,102**	**547,012**	**251.907**	**5,144,849**

FEDERAL AUTHORITIES: GRANTS TO THE STATES
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
FOR CURRENT PURPOSES					
General public services	4,320	4,490	5,917	8,051	8,646
Defence	..	..	..	..	325
Education	100,916	118,923	153,858	433,470	910,657
Health	12,352	11,908	13,836	26,734	47,281
Social security and welfare	4,249	34,112	118,686	22,258	61,823
Housing and community amenities	131	4,151	6,892	7,437	9,494
Recreation and related cultural services	..	..	..	218	70
Economic services	7,924	9,876	13,076	17,121	22,252
Other purposes—					
Financial assistance grants	1,418,518	1,440,878	1,647,293	1,859,905	2,373,811
Special grants	18,680	23,800	38,600	38,550	64,684
Special revenue assistance	43,000	55,000	..	25,000	75,000
Payments under Financial Agreement—					
Interest on State's debt	15,170	15,170	15,170	15,053	15,287
Sinking fund on State's debt	24,550	26,323	27,979	29,509	30,805
Debt charges assistance	11,504	23,008	34,512	46,016	57,520
Natural disaster payments	9,944	1,143	72	4,069	980
Local Government Grants Commission	..	..	..	..	56,345
Total other purposes	*1,541,366*	*1,585,323*	*1,763,626*	*2,018,102*	*2,674,432*
Total grants for current purposes	**1,671,259**	**1,768,783**	**2,075,891**	**2,533,393**	**3,734,981**
FOR CAPITAL PURPOSES					
Education	74,035	85,969	105,569	189,064	415,473
Health	5,404	6,076	7,150	25,099	60,734
Social security and welfare	5,419	8,600	7,683	7,261	7,795
Housing and community amenities	5,136	5,276	11,651	25,044	70,125
Recreation and related cultural services	..	..	..	1,562	12,623
Economic services—					
General administration, regulation and research	142	372	24	24	180
Soil and water resources management	25,587	22,843	17,646	13,571	15,193
Assistance to agricultural and pastoral activities	2,579	13,796	14,523	11,204	10,316
Electricity, gas, water supply	..	..	1,500	..	..
Rail transport	3,624	2,845	1,416	468	734
Sea transport	..	..	3,057	1,000	2,018
Road transport	227,049	255,464	287,439	325,657	373,860
Urban public transport	..	..	..	..	45,259
Other	..	..	50	98	1,667
Total economic services	*258,981*	*295,320*	*325,655*	*352,020*	*449,227*
Other purposes—					
Natural disaster relief	4,686	5,430	−77	20,361	48,011
Capital assistance	200,000	219,100	248,539	278,307	345,878
Total grants for capital purposes	**553,661**	**625,771**	**706,169**	**898,716**	**1,409,868**
TOTAL GRANTS					
Total grants to the States	**2,224,920**	**2,394,554**	**2,782,060**	**3,432,109**	**5,144,849**

General purposes grants

The Financial Assistance Grants. Details of the financial assistance grants arrangements existing in 1972–73 and previous years are given in earlier issues of the Year Book (*see* No. 60, page 578). Existing arrangements are embodied in the *States Grants Act* 1973. An income tax sharing scheme between Commonwealth, State and local government authorities will come into operation in 1976–77 and will replace existing arrangements.

Under the present arrangements the financial assistance grants increase each year in proportion to the increase in average wages in Australia as a whole in the year ending 31 March in the year of payment and to the increase in each State's population in the year ending 31 December in the year of payment, and by a betterment factor of 1.8 per cent. Following the acceptance by the Commonwealth Government of full financial responsibility for financing tertiary education from 1 January 1974, it was agreed that the financial assistance grants would be reduced by the estimated amounts of recurrent expenditure of which the States were thereby being relieved. Financial assistance grants additional to the grants determined by the formula were paid to Western Australia in 1973–74 and 1974–75 and to Tasmania in 1974–75. The following tables show particulars of the calculations of the financial assistance grants for 1974–75.

CALCULATION OF FINANCIAL ASSISTANCE GRANTS FOR 1974–75

($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Base grants—							
1973–74 financial assistance grants	585,507	437,604	318,245	204,918	222,388	91,243	1,859,905
Less additional grants to Western Australia in 1973–74(*a*)	..	..	..	..	10,000	..	10,000
Plus 1973–74 tertiary education 'offsets'(*b*)	36,400	34,800	13,500	12,000	11,600	3,500	111,800
Plus addition to Queensland's Base(*c*)	..	..	2,000	..	..	..	2,000
Total base grants	*621,907*	*472,404*	*333,745*	*216,918*	*223,988*	*94,743*	*1,963,705*
Plus additions under formula(*d*)	190,815	146,801	108,301	69,519	73,542	29,328	618,306
Sub-totals	812,722	619,205	442,046	286,437	297,530	124,071	2,582,011
Less 1974–75 tertiary education 'offsets'(*b*)	75,200	70,800	27,600	24,700	24,200	7,200	229,700
Plus additional grants to Western Australia and Tasmania	..	..	..	..	(*e*)6,500	(*f*)15,000	21,500
Total financial assistance grants	**737,522**	**548,405**	**414,446**	**261,737**	**279,830**	**131,871**	**2,373,811**

(*a*) Comprising a $6.5 million additional financial assistance grant and a further special temporary addition of $3.5 million for 1973–74. (*b*) 'Offsets' agreed to at the June 1973 Premiers' Conference to accompany the assumption of full financial responsibility for tertiary education by the Commonwealth Government from January 1974. (*c*) An addition of $2 million has been made to Queensland's base each year since 1965–66. (*d*) Calculated from the Statistician's estimates of increases in State populations in the year ended December 1974 (a weighted average of 1.88 per cent for all States combined), the Statistician's estimate of the increase in average wages for Australia as a whole in the year ended March 1975 of 26.78 per cent and the betterment factor of 1.8 per cent. (*e*) Agreed to following June 1973 Premiers' conference. (*f*) Addition agreed to following June 1974 Premiers' conference to enable Tasmania to withdraw from the special grants system.

Special Grants. These grants are paid to the financially weaker States as supplements to the financial assistance grants. They are paid on the recommendation of the Grants Commission. The recommendation by the Commission for payment of a special grant consists of two parts: (i) One part is based on an estimate of the claimant State's financial need in the current financial year, and is treated as an advance payment subject to adjustment two years later when the Commission has compared in detail the audited budget results and standards of effort and of services provided in that year for both the claimant State and the States which the Commission takes as 'standard' (New South Wales and Victoria at present). (ii) The other part represents the final adjustment to the advance payment made two years earlier and is known as the completion payment. The following table shows special grants paid in recent years.

GRANTS COMMISSION: SPECIAL GRANTS

($'000)

	1971–72	*1972–73*	*1973–74*	*1974–75*	*1975–76*
Queensland—					
Advance payment	9,000	10,000	10,000	15,000	25,000
Completion payment(*a*)	..	9,750	11,300	9,000	(*b*)
Total	*9,000*	*19,750*	*21,300*	*24,000*	(*b*)
South Australia—					
Advance payment	7,000	13,500	15,000	15,000	..
Completion payment(*a*)	4,900	8,500	2,500	(*c*)10,000	..
Total	*11,900*	*22,000*	*17,500*	*25,000*	..
Tasmania—					
Advance payment	11,000	10,000	10,000	..	..
Completion payment(*a*)	−1,350	(*d*)	(*d*)	..	..
Total	*9,650*	*10,000*	*10,000*	..	..
Grand total	**30,550**	**51,750**	**48,800**	**49,000**	(*b*)

(*a*) Adjustment to estimated grant paid two years previously. (*b*) Not yet determined. (*c*) Represents agreed estimate of completion grant which could have been expected to be recommended by the grants commission if the State had remained claimant. (*d*) No completion grants were or are to be paid to Tasmania in respect of these years.

Minus sign (—) denotes excess of repayment.

Capital assistance grants. Since 1970–71 the Commonwealth Government has provided a portion of the State's Loan Council programs in the form of interest-free capital grants. The grants replace State borrowings and thereby relieve them of debt charges they would otherwise have had to pay. These grants, which were authorised by the *States Grants (Capital Assistance) Acts*, totalled $278.3 million in 1973–74, $345.9 million in 1974–75, and in 1975–76 $430.3 million has been budgeted.

Specific purpose grants

This section briefly outlines some of the more important grants made to the States for specific purposes in 1973–74 and 1974–75. Payments for years prior to 1973–74 are given in earlier issues of the Year Book (*see* No. 60, page 580). Unless otherwise specified, programs are authorised by Commonwealth Appropriation Acts for the relevant years.

General public services—General research

Research grants. The Commonwealth Government agreed to finance a program of research costing $22.8 million in the 1973–75 triennium for projects recommended by the Australian Research Grants Committee.

Education

Universities. Payments to the States for universities were introduced in 1951–52, and details of the States Grants (Universities) Act under which they were continued are given in earlier issues of the Year Book (*see* No. 51, page 923 and No. 52, page 770). The *States Grants (Universities) Act (No.* 2) 1972 authorised grants totalling $343.5 million for the Commonwealth Government's share of the 1973–75 triennial program. However, largely as a result of the assumption of full financial responsibility and various other program increases agreed to since, the Commonwealth Government's contribution to universities expenditure over the 1973–75 triennium is now estimated to total $980.1 million.

(*Colleges of Advanced Education (including Teachers Colleges*). Under the *States Grants (Advanced Education) Act* 1972, the Commonwealth Government was to provide financial assistance to the States of $172.3 million during the 1973–75 triennium for recurrent and capital expenditures. However, there were various amendments to the triennial program since that date and the Commonwealth Government's contribution is now estimated to amount to $742.9 million at December 1975 price levels. The additional grants were authorised by various States Grants (Advanced Education) Acts between 1972 and 1976.

Schools. In 1973–74 and 1974–75 Commonwealth grants of $161.6 million and $433.9 million, respectively, were made to the States for government and non-government schools. These grants were authorised under:—

The *States Grants (Science Laboratories) Act* 1971 which was effective over the four-year period 1 July 1971 to 30 June 1975, and provided grants totalling $43.3 million for science laboratories in secondary schools;

The *States Grants (Secondary Schools Libraries) Act* 1971 which authorised grants totalling $30 million over the three years 1972–1975 for secondary school libraries;

The *States Grants (Schools) Act* 1972 which authorises unmatched capital grants totalling $220.6 million over the five-year period 1 July 1973 to 30 June 1978; and

The *States Grants (Schools) Act* 1973 which provided unmatched capital and recurrent grants totalling $668.7 million in the two calendar years 1974 and 1975.

Technical education. Grants to the States for capital and recurrent purposes for institutions of technical and further education are authorised under the *States Grants (Technical and Further Education) Act* 1974. This Act appropriates a total of $131.0 million over the period 1 July 1974 to 31 December 1976.

Services for children. $6.5 million was made available to the States in 1973–74 and $37.5 million in 1974–75 towards the establishment and operation of pre-schools and child care centres throughout Australia.

Child migrant education. The *Immigration (Education) Act* 1971 authorised payments for the provision of special instructions to migrant children. Payments amounted to $7.0 million in 1973–74 and $11.3 million in 1974–75

Health

Hospitals development program. The 1973–74 Budget provided $4.5 million towards the cost of hospital projects in the capital cities of New South Wales, Victoria and Queensland. In the event, grants were made to all States, and totalled $2.4 million. In 1974–75 the Commonwealth Government provided $30.3 million for development of public hospitals generally and other residential health institutions in the States.

Community health facilities and services. In the two years 1973–74 and 1974–75 grants totalling $45.7 million were made to the States under the Community Health Program. The grants were directed to the development of community-based health services such as health centres and centres providing services for mental health, alcoholism, drug dependency, etc.

Tuberculosis control. Under the *Tuberculosis Act* 1948 the States have been reimbursed since 1949–50 for recurrent and capital expenditure incurred by the States in the provision of facilities for the diagnosis, treatment and control of tuberculosis. Payments in 1973–74 totalled $11.7 million and in 1974–75, $13.7 million.

Schools dental scheme. Payments of $7.5 million in 1973–74 and $18.6 million in 1974–75 were made to State Governments as part of an agreement to share the cost of providing an Australian-wide School Dental Service.

Social security and welfare

Welfare services for the aged. Under three Acts effective from 1969—the *States Grants* (*Home Care*) *Act* 1969, the *States Grants* (*Paramedical Services*) *Act* 1969 and the *States Grants* (*Dwelling for Aged Pensioners*) *Acts* of 1969 and 1974 grants are made to the States for certain services provided wholly or mainly to aged persons or pensioners—specifically: for home care services, paramedical services, senior citizens centres and provision of self-contained dwelling units.

Assistance for deserted wives. Grants of $7.7 million and $6.9 million were made to the States in 1973–74 and 1974–75 respectively for this purpose under the *States Grants* (*Deserted Wives*) *Act* 1968.

Employment. Two schemes, the Special Employment Grant scheme and the Regional Employment Development scheme, were operating in the States in 1974–75. Grants of $40 million were provided to the States under the former scheme. Under the latter scheme, payments of $8.5 million were made to State government departments and State government authorities, and $43.6 million to local government authorities; in addition, $8.4 million was paid to non-government bodies.

Culture and recreation. Grants to the States for cultural and recreational purposes were first made in 1973–74. Assistance in that year amounted to $1.8 million, and totalled $12.7 million in 1974–75.

Economic services—Transport

Roads. Commonwealth Government assistance to the States for roads for the five year period 1969–70 to 1973–74 was governed by arrangements embodied in the *Commonwealth Aid Roads Act* 1969. (For details see Year Book No. 60 page 582). New arrangements were introduced for 1974–75 to 1976–77. The new arrangements subsume general assistance previously given under the Commonwealth Aid Roads Act and assistance for specific roads or road projects (such as beef roads and the sealing of the Eyre Highway). Roads arrangements for 1974–75 to 1976–77 are embodied in three Acts—*the National Roads Act* 1974; the *Roads Grants Act* 1974 and the *Transport* (*Planning and Research*) *Act* 1974. Additional grants of $30 million authorised by *Appropriation Act* (*No*. 4) 1974–75 were provided in 1974–75 as a short term measure to assist employment in the roads sector. For the years 1973–74 and 1974–75 total grants for roads were $325.7 million and $368.3 million respectively.

Urban public transport. A new program was initiated in 1973–74 under which the Commonwealth Government is meeting two thirds of the cost of approved urban public transport projects in the States. The *States Grants* (*Urban Public Transport*) *Act* 1974 and the *Urban Public Transport* (*Research and Planning*) *Act* 1974 together aurhorised the payment of grants of $72.9 million to the States for projects approved in 1973–74 and the *Appropriation* (*Urban Public Transport*) *Act* 1974 appropriated a further $66.1 million for projects approved to commence in 1974–75. However, owing to the lack of legislative authority, no disbursements were made until 1974–75 when $45.3 million was paid.

Tasman Bridge disaster. Appropriation Act (*No*. 4) 1974–75 authorised assistance of $6 million for various purposes connected with coping with the effects of the collapse of the Tasman Bridge in Tasmania.

Economic services—industry assistance and development

Eradication of bovine brucellosis and turberculosis. Total grants for expenditures on the eradication of bovine brucellosis and tuberculosis were $5.1 million in 1973–74 and $6.8 million in 1974–75.

Agricultural extension services grants. From 1948–49 annual grants have been made to the States to promote improved practices in the dairy industry and from 1952–53 further grants have been provided for expansion in the States of agricultural advisory services generally. Grants in 1973–74 totalled $7.7 million and were $8.7 million 1974–75.

Investigation and measurement of water resources. Under the *States Grants* (*Water Resources*) *Acts* of 1964, 1967 and 1970, grants totalling $11.4 million were provided to the States for the purpose of accelerating programs of surface water measurement and investigation of underground water resources. The *States Grants* (*Water Resources Measurement*) *Act* 1973 provided for grants of up to $6.9 million for the surface water measurement program and up to $8.2 million for the investigation of underground water resources for the three-year period commencing 1 July 1973. The legislation was amended to become the *States Grants* (*Water Resources Assessment*) *Act* 1973–74 and to provide an additional $0.8 million as grants for a two-year water quality assessment program.

Other purposes

Natural disasters. Payments to the States for natural disaster relief (drought, flood, bushfire. cyclone, etc.) consist of financial assistance to alleviate personal hardship and distress and assistance with expenditure on other agreed relief and restoration measures when the expenditures are considered to be beyond the capacity of the State concerned to meet from its own resources. Assistance is provided by way of both grants and loans depending on the particular circumstances applying. Payments for natural disaster relief and restoration in 1973–74 totalled $28.2 million (this included a loan component of $3.7 million). In 1974–75, due to an unprecedented number of separate natural disasters in that year, payments to the States totalled $53.2 million (the loan component was $4.2 million).

Other specific purpose grants

Contributions under Financial Agreement. Details of the Financial Agreement between the Commonwealth Government and the States are given in Year Book No. 37, pages 685–90. Under this Agreement the Commonwealth Government undertook to contribute $15,169,824 per annum towards interest payable on the State loan securities for a period of 58 years from 1 July 1927. This amount is distributed among the States as follows: New South Wales, $5,834,822; Victoria, $4,254,318; Queensland, $2,192,470; South Australia, $1,407,632; Western Australia, $946,864; Tasmania, $533,718. In addition, under the Financial Agreement the Commonwealth Government agreed to make certain contributions to the National Debt Sinking Fund for redemption of State loan securities. Details of these are given on pages 625–28 of this chapter.

Debt Charges Assistance. At the June 1970 Premiers' Conference, the Commonwealth Government undertook to make grants to meet the interest and sinking fund contributions on $200 million of State debt in 1970–71, and an additional $200 million each year in 1971–72 to 1974–75. The grants, which met the interest and sinking fund charges on a number of specified securities representing State debt, totalled $172.6 million over this five-year period. The Commonwealth took over the $1,000 million of State debt as at 30 June 1975.

Grants to Local Government authorities recommended by Grants Commission.

A system of grants to the States for on-passing to local government authorities on the advice of the Grants Commission commenced in 1975–75. The purpose of these grants is to reduce financial inequalities existing between local government authorities. A total of $56.3 million was paid in 1974–75.

Advances to the States

The following tables show figures of advances to the States and repayments of advances. More detailed figures appear in *Public Authority Finance: Federal Authorities.*

FEDERAL AUTHORITIES: NET ADVANCES TO THE STATES 1974–75
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Defence	16,126	3,995	5,046	117	744	147	26,174
Housing and community amenities	176,552	152,989	51,792	80,584	57,302	27,192	546,412
Economic services—							
Soil and water resources management	1,872	2,337	−28	2,500	313	..	6,994
Forest resources management	2,100	889	2,340	341	685	769	7,124
Assistance to agricultural and pastoral industries	9,567	8,458	1,199	1,900	3,150	813	25,087
Electricity, gas, water supply	..	..	34,308	4,400	..	..	38,708
Rail transport	439	−96	−1,673	−580	−1,476	−83	−3,468
Sea transport	−162	..	−82	..	−151	1,228	833
Other	..	..	−570	−1,875	..	..	−2,445
Total economic services	*13,816*	*11,588*	*35,494*	*6,686*	*2,521*	*2,727*	*72,832*
Other purposes—							
State works programs	176,900	148,382	88,358	79,784	52,732	45,985	592,141
Special revenue assistance	..	−10,000	..	..	..	..	−10,000
Natural disaster relief	−1,079	−256	−855	−69	..	−320	−2,579
Total other purposes	*175,826*	*138,126*	*87,503*	*79,715*	*52,732*	*45,665*	*579,562*
Total net advances	**382,317**	**306,698**	**179,835**	**167,103**	**113,299**	**75,731**	**1,224,981**

Minus sign (—) denotes excess of repayments.

FEDERAL AUTHORITES: ADVANCES TO THE STATES
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
GROSS					
Defence	9,227	7,034	6,163	7,766	26,805
Housing and community amenities	141,819	12(*a*)	6,610(*a*)	263,634	565,585
Economic services—					
Assistance to agricultural and pastoral industries	10,907	33,797	41,501	27,363	28,477
Other	16,853	11,009	29,636	37,316	57,119
Other purposes—					
State works programs	481,450	672,900(*a*)	733,461(*a*)	588,693	741,541
Other	4,793	17,839	15,000	3,872	3,663
Total gross advances	**665,049**	**742,591**	**832,371**	**928,644**	**1,423,190**
REPAYMENTS					
Defence	466	512	555	592	631
Housing and community amenities	15,182	16,144	16,735	17,380	19,172
Economic services—					
Assistance to agricultural and pastoral industries	1,855	1,947	2,052	3,970	3,391
Other	5,313	5,833	7,904	11,089	9,373
Other purposes—					
State works programs	115,067	123,280	132,195	140,783	149,400
Other	4,425	4,760	5,317	6,274	16,243
Total repayments	**142,308**	**152,476**	**164,758**	**180,089**	**198,209**
NET					
Defence	8,761	6,522	5,608	7,174	26,174
Housing and community amenities	126,637	−16,132(*a*)	−10,125(*a*)	246,254	546,412
Economic services—					
Assistance to agricultural and pastoral industries	9,052	31,850	39,449	23,393	25,087
Other	11,540	5,176	21,732	26,227	47,745
Other purposes—					
State works programs	366,383	549,620	601,266	447,910	592,141
Other	368	13,079	9,683	−2,402	−12,580
Total net advances	**522,741**	**590,115**	**667,613**	**748,555**	**1,224,981**

(*a*) In 1971–72 and 1972–73 funds for housing were provided under the State loan works program.
Minus sign (−) denotes excess of repayments.

Details of some of the more important State projects for which the Commonwealth Government is providing financial assistance by way of advances are set out below. (In some instances assistance is provided by way of both grants and advances. However, in the projects listed, advances represent the major component).

Housing

Housing Agreement. Under successive Commonwealth-State Housing Agreements operative between 1945–46 and 1970–71 such amounts as were nominated for housing by each State Government out of its total works and housing program approved by the loan Council became, formally, the borrowing program of the Commonwealth Government (or part thereof) and were provided by the Commonwealth Government as advances repayable over fifty-three years. Over most of this period, the advances have been provided at concessional rates of interest.

The Housing Agreement was not renewed on its expiry at the end of 1970–71. Instead, the Commonwealth and State Governments agreed on arrangements under which housing allocations would be met, in the same way as other expenditures by the States, out of their approved Loan

Council borrowing programs which were higher on that account, than they would otherwise have been. Since this meant the withdrawal of the former interest concession on funds for housing, specific revenue grants were introduced in lieu of that concession.

Under arrangements agreed to at the June 1973 Premiers' Conference, the Commonwealth Government entered into a new Agreement under which the States receive advances for welfare housing purposes during the five years 1973–74 to 1977–78, these advances to be outside, and in addition to, the State Loan Council programs. Advances made under the Agreement will be repaid over fifty-three years at concessional rates of interest. The arrangements for payment of specific revenue grants were revised with the reintroduction of direct interest concession.

The advances paid in 1973–74 totalled $218.7 million. The advances made in 1974–75 comprised an initial allocation of $235 million plus additional funds of $150.4 million bringing advances for the year to $385.4 million.

Housing for Servicemen. Advances to the States under the 1956–66 Housing Agreement ceased on 30 June 1971, and a new agreement with the States was signed. The *Commonwealth-State Housing Agreement* (*Servicemen*) 1972 provides for the erection of housing for servicemen by the States on generally the same terms and conditions as applied under the 1956–66 Housing Agreements with one essential difference, being that all the funds required for the erection of housing for servicemen are being provided as advances to the States outside the Loan Council arrangements. The advances are made at a rate of interest equal to the long term bond rate and are repayable over fifty-three years. Advances to the States in 1973–74 totalled $7.8 million and in 1974–75 advances totalled $26.8 million.

Urban and Regional Development

The *Urban and Regional Development* (*Financial Assistance*) *Act* 1974 authorises the provision of financial assistance to the States for various types of urban and regional development programs, covering growth centres, land commissions, area improvement and sewerage programs and for water supply, flood mitigation and the national estate. Grants and advances for these projects grew rapidly from $55.8 million in 1973–74 to $235.0 million in 1974–75.

Water Supply and Electricity

Gladstone Power Station. Under the *Gladstone Power Station Agreement Act* 1970 financial assistance is being provided to Queensland by way of loans to help finance the construction of a thermal power station at Gladstone in Central Queensland. Payments were $26.6 million in 1973–74 and $32.4 million in 1974–75.

Industry Assistance and Development

Softwood Forestry. Under the *Softwood Forestry Agreements Act* 1972 financial assistance is being provided (by way of loan) for a further program of increased planting of softwood forests. Advances totalled $4.9 million in 1973–74 and $7.1 million in 1974–75.

Rural Reconstruction. In accordance with an agreement reached between the Commonwealth Government and the States in 1971, and extended in 1973, assistance is made available under the *States Grants* (*Rural Reconstruction*) *Act* 1971, partly as grants and partly as loans, for the purpose of a rural reconstruction scheme. The Act provides for the scheme to operate to 30 June 1976.

Payments for rural reconstruction totalled $35.8 million in 1973–74 of which $8.9 million was provided by way of grants and $26.8 million by way of loans. Payments for the following year were $28.8 million, comprising $7.2 million by way of grants and $21.6 million by way of loans.

Dairy Adjustment Program. The original scheme for this purpose, which ran in parallel with the rural reconstruction scheme, was authorised by the *Marginal Dairy Farms Agreement Act* 1970, which provided for agreements to be made between the Commonwealth and State Governments to assist in the reconstruction of dairy farms.

In April 1974 the Commonwealth Government announced a two-year $28 million dairy adjustment assistance scheme, subsequently embodied in the *Dairy Adjustment Act* 1974, under which the original scheme was continued and broadened. The new program operates to 30 June 1976. Assistance is provided by way of grants and advances. Payments under the program totalled $1.1 million in 1973–74 (comprising $0.6 million grants and $0.5 million loans) and $8.9 million in 1974–75 (comprising $2.0 million grants and $6.9 million loans).

Brigalow Lands Development Scheme. The *Brigalow Lands Agreement Act* 1962 approves an agreement with Queensland for the provision of financial assistance to that State for the development of 452,270 hectares in Fitzroy River Basin. The principal purpose of the assistance is to increase the production of beef cattle. The Act provides for assistance in the form of interest-bearing loans, subject to an overall limit of $23 million, to finance expenditure incurred by the State on specified works during the thirteen years ending 30 June 1975.

Dartmouth Dam. Under the *Dartmouth Reservoir Agreement Act* 1970 the Commonwealth Government is providing financial assistance to New South Wales, Victoria and South Australia by way of loans towards their shares of the cost of constructing the Dartmouth Reservoir. Payments to the three States to 30 June 1975 amounted to $12.4 million.

Main components of receipts

The main components of the receipts of Commonwealth Government authorites are taxation, income of public enterprises and other factor income transfers, and borrowing and financing transactions. Taxation constitutes by far the major source of receipts. Borrowing is now of minor significance so far as Federal authorities are concerned, although, as may be seen in later tables, it has become an increasingly significant source of funds for the States. The realisation of the increasing commitment of State revenues to the servicing of a rapidly growing debt burden led to the arrangement agreed to at the 1970 Premiers' Conference whereby the Commonwealth Government now makes interest-free capital grants to the States in lieu of moneys previously obtained by the States from borrowings (*see* page 574.)

In what follows, an account is given of the system of Commonwealth Government taxation, and some details are given of the current operations of Federal public enterprises. Borrowing and other financing activities of Federal authorities are dealt with for convenience in a later section relating to the debt of all public authorities.

Commonwealth Government taxation—summary

The following tables show Commonwealth Government taxation receipts classified by type of tax for the past five years, and the proportion of each type to total collections.

FEDERAL AUTHORITIES: TAXATION BY TYPE OF TAX
($'000)

Type of tax	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Taxes—					
Income taxes—					
Individuals	3,174,983	3,764,686	4,084,492	5,485,143	7,708,552
Companies(*a*)	1,379,154	1,462,012	1,544,612	1,933,870	2,343,941
Dividend (withholding)	35,956	42,002	51,197	56,648	59,818
Interest (withholding)	12,318	15,650	21,406	22,588	28,298
Total income taxes	*4,602,411*	*5,284,350*	*5,701,707*	*7,498,249*	*10,140,610*
Estate duty	70,101	67,258	66,408	66,018	63,787
Gift duty	7,795	8,530	6,941	9,725	16,204
Rates on land	2,094	5,403	6,266	7,361	8,782
Customs duties	465,989	468,732	513,381	604,443	840,515
Excise duties	1,053,613	1,213,056	1,268,289	1,554,581	1,728,621
Sales tax	632,537	680,772	764,868	968,725	1,154,266
Primary production taxes	26,922	28,445	34,846	64,441	143,428
Broadcasting listeners' and television viewers' licences(*b*)	49,563	61,785	67.050	68,458	18,816
Broadcast station licences	341	474	491	591	713
Television station licences	1,647	1,967	2,024	2,410	2,819
Stevedoring industry charge	13,131	15,987	16,979	19,389	21,921
Payroll tax	247,657	91,037	6,291	7,606	15,523
Other taxes	4,209	5,285	6,703	9,330	10,332
Total taxes	*7,178,010*	*7,933,081*	*8,462,244*	*10,881,327*	*14,166,366*
Fees from regulatory services	2,585	3,206	4,428	5,231	8,221
Fines	1,716	1,914	2,510	2,712	2,621
Unfunded employee retirement contribution	..	..	945	27,248	34,513
Other current transfers n.e.c.	190	386	182	762	788
Total taxation	**7,182,501**	**7,938,587**	**8,470,309**	**10,917,279**	**14,212,481**
of which—					
Taxation levied in the Territories only	7,874	15,696	19,826	25,392	35,079

(*a*) Excludes income tax paid by public enterprises: 1970–71, $16.2m; 1971–72, $16.5m; 1972–73, $16.8m; 1973–74, $19.9m; 1974–75, $14.8m. (*b*) Abolished in September 1974.

FEDERAL AUTHORITIES: PROPORTION OF EACH TYPE OF TAXATION TO TOTAL TAXATION

(Per cent)

Type of tax	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Income tax	64.1	66.6	67.3	68.7	71.3
Estate duty	1.0	0.8	0.8	0.6	0.4
Gift duty	0.1	0.1	0.1	0.1	0.1
Rates on land	..	0.1	0.1	0.1	0.1
Customs duties	6.5	5.9	6.1	5.5	5.9
Excise duties	14.7	15.3	15.0	14.2	12.2
Sales tax	8.8	8.6	9.0	8.9	8.1
Primary production taxes	0.4	0.4	0.4	0.6	1.0
Broadcasting listeners' and television viewers' licences(*a*)	0.7	0.8	0.8	0.6	0.2
Stevedoring industry charge	0.2	0.2	0.2	0.2	0.2
Pay-roll tax	3.4	1.1	0.1	0.1	0.1
Other taxes, fees, fines, etc.	0.1	0.1	0.1	0.4	0.4
Total taxation	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(*a*) Abolished in September 1974.

Taxes on income

A description of the development of income taxes in Australia appeared in Year Book No. 35, page 926. Since July 1942 the Commonwealth Government, under the uniform tax arrangement, has been the only authority imposing taxes on income.

The laws dealing with the assessment and imposition of Income tax at 31 December 1975 were—*Income Tax Assessment Act* 1936, *Income Tax Act* 1975, *Income Tax* (*Dividends and Interest Withholding Tax*) *Act* 1974, *Income Tax* (*Withholding Tax Recoupment*) *Act* 1971, *Income Tax* (*Bearer Debentures*) *Act* 1971, *Income Tax* (*Drought Bonds*) *Act* 1969, and the Income Tax Regulations. The second-mentioned Act is an annual measure, and its primary purpose is to declare the rates of tax payable for the financial year.

Both individuals and companies are liable for income tax. Private companies are subject to tax on undistributed income in addition to the primary income tax levied on all companies.

The operation of the *Income Tax Assessment Act* 1936 is affected by the following Acts:

(*a*) *Taxation Administration Act* 1953, which provides for the administration of certain Acts relating to taxation.

(*b*) *Income Tax* (*International Agreements*) *Act* 1953 which gives the force of law to comprehensive double taxation agreements between the Australian Government and the Governments of the United Kingdom, the United States of America, Canada, New Zealand, Singapore, Japan and the Federal Republic of Germany. This Act also gives the force of law to an agreement with the Government of France for the avoidance of double taxation on income derived from international air transport. An agreement with Italy dealing with airline profits has been signed, but has not yet been given the force of law.

(*c*) *Diplomatic Privileges and Immunities Act* 1967 which provides for the exemption from income tax of certain income of diplomatic representatives, their staff and families.

(*d*) *International Organisations* (*Privileges and Immunities*) *Act* 1963, and Regulations made under that Act, which provide for exemption from income tax of certain income of international organisations and their officials.

(*e*) *Consular Privileges and Immunities Act* 1972, which provides for the exemption from income tax of certain income of consular representatives, their staff and families.

(*f*) *Loan* (*Drought Bonds*) *Act* 1969 which authorises the issue of drought bonds and empowers the Commissioner of Taxation to declare when drought bonds have become redeemable.

Individuals with incomes in excess of $1,040, non-profit companies with total incomes in excess of $416, and all other companies, partnerships and trusts deriving income are required to lodge returns of income each year.

Where applicable, income tax payable is assessed and assessment notices showing the amounts payable are issued during the year following the year of income. For individuals the approximate amount payable, however, has already been collected during the income year (from employees by deductions from salary or wages and from non-employees by a provisional tax). The amount shown on the assessment notice is therefore adjusted against the amount already paid and any difference either collected or refunded.

Taxes on income—individuals

Pay-as-you-earn-system

Salary and wage earners are subject to tax instalment deductions by employers according to a prescribed scale which shows the amount to be deducted according to income and number of dependants. Under the group employer scheme of deduction (covering most employers of more than ten persons), the amount deducted is required to be regularly remitted to the Australian Taxation Office.

Not later than 14 July each year employers are required to supply each employee with a group certificate showing amount earned and deductions made during the year ended 30 June.

Under the stamp scheme used by employers other than group employers, a stamp deduction sheet in two parts is used. Each four weeks the employer purchases stamps (also in two parts) for the amount of deductions made each pay day and sticks one part on each half of the sheet. At the end of the year the employer gives the employee one half of the sheet and sends the other half to the Taxation Office. The employee's half is then used in the same way as a group certificate.

Individuals with taxable income of $400 *or more from other than salary or wages* may be required to pay provisional tax in respect of that income. The provisional amount is intended as an approximation to the tax which will be assessed after the return of income for the current year has been lodged. It is ascertained by assuming that the income of the current year will be the same as that for the previous year and applying to that income the rates for the current year. The assessment notice shows the tax assessed on income from the previous year less any provisional tax already paid for that year and provisional tax payable for the current year.

Assessable income—individuals

Assessable income (from which deductions are made to arrive at taxable income) basically includes all receipts within the ordinary meaning of the word 'income', but excludes items of income that are specified as exempt. Assessable income specifically includes certain receipts such as casual profits arising from the sale of property held less than one year and profits arising from the sale of property acquired for the purpose of profit-making by sale regardless of the period the property is held before sale. The value to employees of allowances and benefits given by employers for services rendered is also specifically included in the assessable income of the employees. Receipts such as gifts (other than gratuities received by an employee in the course of employment), legacies, lottery wins and other receipts of capital generally do not form part of the assessable income.

Certain types of income are exempt from tax, including (i) war pensions, (ii) invalid pensions and child endowment and certain other payments under the *Social Services Act* 1947 and the *Tuberculosis Act* 1948, (iii) income from gold-mining and some other mining operations (iv) twenty per cent of certain mining profits, (v) income received from a scholarship, bursary or other educational allowance (vi) income of certain non-profit institutions and mutual income of some other organisations, (vii) income of specified superannuation funds, (viii) pay, allowances and bounties for part-time duty, and gratuity payable on a call out for continuous full-time service of members of the Defence Force Emergency Reserves, and (ix) pay allowances of members of the Defence Forces while allotted for duty in special areas.

Deductions

The taxable income to which the rates of tax are applied is arrived at by deducting from the assessable income any allowable deductions. Allowable deductions include:

General Deductions. Losses and outgoings (not of a capital nature) incurred during the year in gaining or producing assessable income, trading losses incurred in previous years, bad debts, and depreciation of plant. Primary producers may also be allowed deductions for amounts subscribed for drought bonds.

Living-away-from-home Allowance. Where the allowance is paid to an employee under any award, industrial agreement, etc.—

(*a*) if it is received in cash and does not exceed $7 per week, a deduction is allowable of the amount of the allowance, up to $5 per week;

(*b*) if it is received otherwise than in cash and exceeds a value of $2 per week but does not exceed a value of $5 per week, a deduction is allowable of the excess of that value over $2 per week.

In any other case the deduction allowable is the amount which the Commissioner deems reasonable but may not exceed the total amount received less $2 per week.

Subscriptions paid in respect of membership of any trade, business or professional association or union. (Deductions may be limited to $42 in respect of subscriptions to any union, association, etc.)

Interest Payments on Housing Loans. A deduction is allowable for interest paid by a resident on a housing loan connected with a dwelling used during the whole or part of the year of income as the taxpayer's sole or principal residence. Where a loan is used to acquire vacant land the concession is not available for interest paid before the year of income in which a dwelling erected on the land is occupied by the taxpayer.

In allowing the concession the combined net income of a husband and wife is taken into account. Net income means total income from all sources less the expenses incurred in earning it, and includes exempt income other than child endowment or benefits paid by the Commonwealth Government for domiciliary nursing care. Taxpayers with combined net income of $4,000 or less in a year of income may claim the whole of home loan interest payments. Where the combined net income is greater than $4,000 the deduction is reduced by 1 per cent for each $100 of the excess. No deduction is allowable where the combined net income is $14,000 or more.

Gifts of $2 and upwards to specified funds, authorities and institutions including public benevolent institutions, approved research institutions for scientific research, building funds for schools conducted by non-profit organisations, etc.

Rebates of Tax

From the gross amount of tax calculated by applying the relevant rate to the taxpayer's taxable income a deduction is made for any rebates allowable to the taxpayer.

Dependant, housekeeper and sole parent rebates. A concessional rebate of the relevant amount specified below for each *dependant* is allowable to a resident taxpayer if, during the whole of the year of income, the taxpayer is the sole contributor to the dependant's maintenance and that dependant does not have a separate net income in excess of $150.

Dependant	*Maximum rebate*
	$
Spouse, daughter-housekeeper	400
Parent or parent-in-law	400
One child under 16 years, not being a student	200
Each other child under 16 years, not being a student	150
Student	200
Invalid relative	200

If a person in one or other of these dependant categories is a dependant during part only of the year of income (such a person residing with the taxpayer is ordinarily regarded as a dependant throughout the period of residence) the maximum rebate is proportionately reduced.

Where a person has a separate net income in excess of $150 while a dependant of a taxpayer the rebate otherwise allowable is reduced by $1 for every $4 by which the separate net income exceeds $150, irrespective of the period over which the person has derived the income. When two or more people contribute to the maintenance of a person who is a dependant of both of them the rebate allowable is apportioned between the contributing taxpayers.

A concessional rebate of $400 is allowable to a resident taxpayer in respect of a *housekeeper* who, during the whole of the year of income, is wholly engaged in keeping house in Australia for the taxpayer, and has the care of (*a*) a child or step-child of the taxpayer, less than 16 years of age; (*b*) any other child under 16 years of age or invalid relative in respect of whom the taxpayer is entitled to a rebate; or (*c*) the taxpayer's spouse if in receipt of an invalid pension under the Social Services Act.

If these conditions apply for only part of the year, a proportionate rebate may be allowed. Where the taxpayer is married, a rebate may be allowable for a housekeeper if the housekeeper is engaged in caring for an invalid spouse (*see* (*c*) above) or the Commissioner is of the opinion that, because of special circumstances it is just to allow a rebate. The rebate is not allowable in respect of any period during which the taxpayer is entitled to a deduction for a daughter-housekeeper.

A concessional rebate of $200 is allowable to a *sole parent*, i.e., a resident single, widowed or divorced person who has the sole care of a child under sixteen years of age or a student (up to 25 years of age) in respect of whom a rebate is allowable, and is not entitled to a rebate for a housekeeper or daughter-housekeeper.

Concessional rebates

Rebates may be allowed to resident taxpayers in respect of the expenses listed below. The amount of the rebate is $540 or 40 per cent of the total of the expenses in respect of which rebates are allowable, *whichever is the greater*, but the rebate cannot exceed the tax otherwise payable. As $540 is 40 per cent of $1,350 a taxpayer whose rebatable expenses do not exceed $1,350 does not need to itemize those expenses in order to be allowed this rebate. The items of expenditure subject to rebate are as follows.

Medical, dental, optical, etc. expenses. Rebates are allowable in respect of medical, dental, optical and therapeutic treatment, expenses paid by the taxpayer less any amounts in respect of those expenses which are received or receivable by the taxpayer or any other person from a Government or friendly society or medical benefit fund. Included are amounts paid in respect of artificial limbs and eyes, hearing aids and medical and surgical appliances and the remuneration of an attendant of a person who is blind or permanently confined to a bed or invalid chair. Domiciliary nursing care benefits are to be disregarded in calculating the rebatable amount in respect of medical expenses.

Rebates in respect of the above medical, etc., expenses are allowable only for expenditure in respect of a resident taxpayer, spouse, children under 21 years of age or any other 'dependant' resident in Australia but not a 'housekeeper'.

Funeral, burial or cremation expenses. Rebates are allowable only in respect of the taxpayer's spouse, children under 21 years of age or any other 'dependant', but not a 'housekeeper', provided the dependant was a resident of Australia at the time of death. The amount of expenses allowable in respect of any one dependant is limited to $100.

Payments to medical or hospital benefit funds. For the personal benefit of the taxpayer, his spouse or children.

Adopted children. Legal expenses and court costs of the kind normally incurred by a taxpayer in adopting a child.

Payments of life, sickness and accident insurance premiums and also payments to a *Friendly Society, Superannuation, Sustentation or similar Fund.* Amounts subject to rebate are limited to a total of $1,200 in respect of such payments made on behalf of the taxpayer, his spouse or children. Where policies are taken out on or after 1 January 1973 or where the first premium of a policy was paid on or after that date rebates for premiums of such policies are *not* allowable if the benefits, other than death benefits, are payable within a period of 10 years of commencement of risk.

Education expenses not exceeding $250 in respect of each child of the taxpayer or 'dependant' under 25 years of age receiving full-time education. Education expenses include expenditure for recognised school uniforms, on school fees, board and accommodation, text books, stationery, equipment and fares.

Self-education expenses paid by the taxpayer for or in connexion with a course of education undertaken by him for the purpose of gaining qualifications for use in carrying on a profession, business or trade or in the course of employment. The maximum amount subject to rebate is $250.

Calls. One-third of the amount of calls paid by the taxpayer in the year of income on shares owned by him in a company carrying on as its principal business afforestation in Australia.

Rates and land taxes paid by the taxpayer for which he is personally liable. The maximum amount rebatable is $300 and must be in respect of a sole or principal place of residence.

Other rebates

Zone allowance rebate. A separate rebate is allowable to resident taxpayers who have resided in Zone A or B (prescribed isolated areas) for more than one-half of the income year. The rebates are as follows.

(a) Zone A: a rebate equal to the sum of $216 and 25 per cent of the rebates allowable to the taxpayer for maintenance of dependants, for sole parent and housekeeper;

(b) Zone B: a rebate equal to the sum of $36 and 4 per cent of the rebates allowable to the taxpayer for maintenance of dependants, for sole parent and housekeeper.

Overseas service rebate. Separate rebates are also allowable to certain members of the Defence Force serving in prescribed overseas localities. Where the period of service is more than one-half of the year of income, the rebate is equal to the Zone A rebate. Where the period is less than one-half of the year of income, a proportionate part of the Zone A rebate is allowable.

Rebate for government and other loan interest. A rebate of tax may be allowed in respect of certain Government and other loan interest included in an individual's taxable income. Particulars are given at page 586.

Rebate for visiting experts. The law provides special tax concessions, in respect of remuneration earned by certain visiting experts during a visit to Australia, that are in the course of being phased out. These concessions include a rebate of tax which has the broad effect of reducing the Australian tax payable on the visitor's Australian earnings to the amount that he would have had to pay in his home country if he had earned the remuneration there.

The provisions continue for income years up to an including the income year ending on 30 June 1978 in relation to a visit that commenced on or before 30 June 1973, or that commences after that date pursuant to a contract to make the visit entered into on or before 14 May 1973.

Effective exemption from tax

For the income years from 1963–64 to 1971–72 inclusive, the income of a taxpayer without dependants was exempt from income tax if it did not exceed $416. For years 1972–73 to 1975–76 inclusive the income of a taxpayer without dependants was exempt from income tax if it does not exceed $1,040. The effect of deductions or rebates for dependants was to exempt resident taxpayers up to the incomes shown in the samples hereunder.

RESIDENT TAXPAYERS: EFFECTIVE EXEMPTIONS FROM INCOME TAX
($)

	Taxpayer with—					
			Wife and—			
Income years ended June—	*No dependants*	*Wife only*	*one child*	*two children*	*three children*	*four children*
1964 to 1967	416	702	884	1,014	1,144	1,274
1968 to 1972	416	728	936	1,092	1,248	1,404
1973 and 1974	1,040	1,404	1,664	1,872	2,080	2,288
1975	1,040	2,468	3,148	3,564	3,980	4,304
1976	2,518	4,000	4,740	5,228(*a*)	5,800(*b*)	6,371(*c*)

(*a*) Neither of whom is a student child. (*b*) Including one student child. (*c*) Including two student children.

Rates of income tax on individuals

The tables on page 586 shows the rates of income tax for income years 1974–75 and 1975–76 Rates for income years 1954–55 to 1973–74 were published in Year Book No. 60 (page 590).

For *primary producers* the rate of income tax for the current year is, in general, determined by the average of the taxable incomes for the five years up to and including the current year. The application of the averaging provisions is limited to that part of the taxable income which does not exceed $16,000. When the taxable income does exceed $16,000, the balance is taxed at ordinary rates applicable to that part. When the taxable income is less than $16,000, the rate of tax for averaging purposes is limited to the rate on a taxable income of $16,000.

The taxable income, including abnormal receipts, of *actors*, *artists*, *inventors*, etc. is taxed at the rate appropriate to the normal taxable income plus one-third of the abnormal receipts.

Interest derived from bonds, etc., issued between 1 January 1940 and 31 October 1968 by the Commonwealth Government, or on certain State semi-government loans issued free of State income tax, is subject to a rebate of income tax of 10 cents for each $1 of interest received. The rebate does not apply to interest received from bonds, etc., issued on or after 1 November 1968.

Indexation of the Personal Income Tax System

Automatic indexation of the personal income tax system, with effect from 1 July 1976, was announced on 20 May 1976. Legislation to that effect has now been passed.

The net tax payable by a taxpayer is determined (*a*) by calculating tax payable on his taxable income, according to the personal income tax rate schedule; and (*b*) deducting from that amount any rebates to which he is entitled.

Unless provision to the contrary is made, as taxable income increases the marginal and average tax rates corresponding to the taxable income also increase, because the income is then further up the progressive rate scale. Tax payable therefore becomes a larger percentage of taxable income than before. Any rebates fixed in money terms (e.g. dependants' rebates, and the general rebate) also become a smaller percentage of taxable income. For both reasons, net tax payable becomes a larger percentage of taxable income.

If taxable income increased at *the same rate* as the price level, the *before-tax real* income would remain unchanged. But in those circumstances, for the reasons noted above, net tax payable would become a larger percentage of taxable income, and the disposable *after-tax* income would decrease in *real* terms. Previously, there was no provision for automatic adjustments to the personal income tax system to prevent such effects of inflation. Adjustments could be made on a discretionary basis by amending the income tax law. The law now provides for indexation of the basic parts of the system; adjustments will now occur automatically each year *unless* the law is changed. The effects of indexation are reflected in pay-as-you-earn deductions from salaries and wages from 1 July 1976.

The indexation provisions of the law embrace the income brackets of the rate scale, the general rebate, the rebates for dependants (other than rebates for dependent children and students which have been abolished as part of the new family allowance arrangements), the housekeeper rebate and the sole parent rebate.

These are to be automatically adjusted each year for increases which have occurred in the Consumer Price Index. The average level of the index in the year ending with the March quarter immediately preceding the year of income is compared with its average level in the twelve months ending with the previous March quarter. Any part of the increase that is attributable to higher indirect taxes imposed by the Commonwealth Government is netted out for the purpose of indexing the personal income tax system. The adjustment factor for 1976–77 indexation purposes is 13 per cent, 1 percentage point less than the movement in the published CPI—the difference reflects the effects of increases in indirect taxes during the period over which the movement was measured.

The indexation arrangements have the following effects.

(*a*) The steps in the marginal tax rate schedule are widened in proportion to the price index as follows

1975–76 Scale Taxable income	*1976–77 Scale Taxable income*	*Marginal rate*
$	$	cents
1– 2,000	1– 2,260	20
2,000– 5,000	2,260– 5,650	27
5,000–10,000	5,650–11,300	35
10,000–15,000	11,300–16,950	45
15,000–20,000	16,950–22,600	55
20,000–25,000	22,600–28,250	60
25,000 and over	28,250 and over	65

(*b*) These adjustments ensure that if a taxpayer's taxable income increases by the same percentage as the price index, the tax payable on it under the rate schedule will also increase by that same percentage (without indexation the tax payable would increase by more). That implies that tax payable remains the same in *real* terms.

(*c*) The rebates which are a specified amount and are indexed also increase in amount by the same percentage as taxable income, and remain the same in *real* terms.

(*d*) Both of these elements of the system also have the effect that a taxpayer on a fixed money income (which falls in real terms if prices rise) will have his tax reduced under indexation.

As already noted, the index applied relates to a *past* year. This is necessary for practical reasons. In any year there is therefore likely to be a difference between the price change experienced and that used for indexation (e.g. if prices were to rise by less than 13 per cent in 1976–77, tax indexation this year at that rate would tend to *increase* real after-tax incomes, not merely sustain them). Over a number of years the differences and their effects can be expected to average out to a substantial extent, with over-compensation for effects of price increases on the tax system occurring in some years, and under-compensation in other years.

In the 1976–77 income year, the rebate allowed for the maintenance of a spouse, daughter housekeeper or housekeeper, and the sole parent rebate, have been increased from $400 to $500 and $200 to $350, respectively. These increases were decided as a separate matter and are larger than the increases required by the strict application of the 13 per cent indexation factor.

FEDERAL INCOME TAX—INDIVIDUALS: GENERAL RATES, 1974–75 AND 1975–76 INCOME YEARS

1974–75(a)				*1975–76(b)*			
Total taxable income				*Total taxable income*			
Column 1 *Not less than—*	*Column 2* *Not more than—*	*Tax on amount in column 1*	*Tax on each further $ of income*	*Column 1* *Not less than—*	*Column 2* *Not more than—*	*Tax on amount in column 1*	*Tax on each further $ of income*
$	$	$	cents	$	$	$	cents
Nil	1,000	Nil	1	1	2,000	Nil	20
1,000	2,000	10	7	2,000	5,000	400	27
2,000	3,000	80	14	5,000	10,000	1,210	35
3,000	4,000	220	20	10,000	15,000	2,960	45
4,000	5,000	420	26	15,000	20,000	5,210	55
5,000	6,000	680	32	20,000	25,000	7,960	60
6,000	7,000	1,000	38	25,000	..	10,960	65
7,000	8,000	1,380	44	..	..	..	..
8,000	10,000	1,820	48	..	..	..	..
10,000	12,000	2,780	52	..	..	..	..
12,000	16,000	3,820	55	..	..	..	..
16,000	20,000	6,020	60	..	..	..	..
20,000	40,000	8,420	64	..	..	..	..
40,000	..	21,220	67	..	..	..	..

(*a*) With certain exceptions no tax is payable by an individual where the taxable income does not exceed $1,040. In cases where the taxable income exceeds $1,040 but does not exceed $1,061 the tax is not to exceed 66 per cent of the excess of the taxable income over $1,040. The tax so ascertained is reduced by any rebate or credit to which the taxpayer is entitled. (*b*) Tax is not payable by an individual unless the taxable income exceeds $1,040. (Where it exceeds $1,040 but does not exceed $1,492 the tax is limited to 66 per cent of the excess). However, because of the general concessional rebate of $540 allowable to all resident taxpayers, a resident taxpayer is not called on to pay tax unless the taxable income is at a higher level than $1,041. A resident taxpayer who is not subject to averaging or to the notional income provisions does not pay tax unless the taxable income is $2,519 or more. (The tax-free point would be different for those who are subject to the averaging or notional income provisions).

Income tax payable on specified incomes

The following table shows, for the income years 1967–68 to 1975–76, the actual income tax payable by taxpayers with various incomes and numbers of dependants. For 1974–75 allowance has been made for the low income family rebate and in 1975–76 the general concessional rebate of $540 has been applied.

FEDERAL INCOME TAX PAYABLE ON SPECIFIED INDIVIDUAL INCOMES 1967-68 TO 1975-76 INCOME YEARS

($)

Income(a)	*1967–68 to 1969–70*	*1970–71*	*1971–72*	*1972–73 and 1973–74*	*1974–75*	*1975–76*
TAXPAYER WITH NO DEPENDANTS						
$						
1,000	54.83	49.50	50.41	. .	. .	. .
3,000	462.78	416.66	424.28	359.50	220.00	130.00
5,000	1,140.10	1,026.53	1,045.32	917.30	680.00	670.00
7,000	1,982.86	1,784.42	1,817.06	1,630.10	1,380.00	1,370.00
10,000	3,487.56	3,139.06	3,196.48	2,888.70	2,780.00	2,420.00
15,000	6,395.48	5,910.66	6,018.78	5,490.70	5,470.00	4,670.00
20,000	9,465.36	9,047.16	9,212.66	8,448.70	8,420.00	7,420.00
TAXPAYER WITH DEPENDENT WIFE						
1,000	23.27	21.12	21.51	. .	. .	. .
3,000	378.97	341.26	347.51	283.35	74.40	. .
5,000	1,020.95	919.18	936.00	801.00	534.40	270.00
7,000	1,842.77	1,658.41	1,688.75	1,492.14	1,234.40	970.00
10,000	3,322.21	2,990.35	3,045.06	2,728.17	2,605.28	2,020.00
15,000	6,210.32	5,730.29	5,835.11	5,291.95	5,269.80	4,270.00
20,000	9,272.20	8,847.60	9,009.45	8,229.20	8,201.60	7,020.00
TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD						
1,000	8.71	7.97	8.12	. .	. .	. .
3,000	326.54	294.15	299.54	232.97	. .	. .
5,000	945.48	851.18	866.75	722.22	430.40	70.00
7,000	1,749.40	1,574.42	1,603.22	1,394.13	1,130.40	770.00
10,000	3,212.00	2,891.21	2,944.11	2,613.51	2,480.48	1,820.00
15,000	6,086.88	5,610.05	5,712.67	5,149.99	5,126.80	4,070.00
20,000	9,143.43	8,714.57	8,873.98	8,072.42	8,045.60	6,820.00
TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN(*b*)						
1,000	. .	. .	. .	. .	. .	. .
3,000	289.54	260.84	265.61	197.19	. .	. .
5,000	888.86	800.16	814.80	659.20	347.20	. .
7,000	1,681.38	1,513.28	1,540.97	1,319.87	1,047.20	620.00
10,000	3,129.32	2,816.86	2,868.39	2,521.78	2,380.64	1,670.00
15,000	5,994.29	5,519.86	5,620.83	5,036.42	5,012.40	3,920.00
20,000	9,046.84	8,614.78	8,772.37	7,947.00	7,920.80	6,670.00

(*a*) Income remaining after allowing all deductions other than deductions for dependants. (*b*) Neither of whom is a student.

Income tax assessments—Individuals

The following table shows for the 1973–74 income year the number of taxpayers, income, and net income tax assessed for individuals.

FEDERAL INCOME TAX ASSESSMENTS(*a*): TAXABLE INDIVIDUALS BY GRADE OF NET INCOME AND BY OFFICE OF ASSESSMENT

(Income derived in the year 1973–74)

Grade of net income(b) and office of assessment	*Taxpayers*			*Net income(b)*	*Total taxable income(c)*	*Net income tax assessed*
	Males	*Females*	*Total*			
$ $	No.	No.	No.	$'000	$'000	$'000
Under 1,200	21,886	38,458	60,344	64,976	63,561	2,235
1,200– 1,399	30,564	68,312	98,876	128,611	122,290	6,271
1,400– 1,599	32,873	73,172	106,045	159,161	149,097	8,957
1,600– 1,799	35,285	77,672	112,957	192,032	176,939	11,877
1,800– 1,999	39,531	79,925	119,456	227,019	207,565	15,134
2,000– 2,199	47,585	86,462	134,047	281,526	257,156	19,219
2,200– 2,399	52,779	88,818	141,597	325,679	295,578	23,572
2,400– 2,599	53,952	87,408	141,360	353,266	318,713	27,729
2,600– 2,799	55,751	87,593	143,344	386,883	348,126	32,925
2,800– 2,999	56,737	88,654	145,391	421,578	378,462	38,411
3,000– 3,199	59,084	89,983	149,067	462,035	414,382	44,994
3,200– 3,399	62,538	91,080	153,618	506,975	453,660	52,222
3,400– 3,599	66,336	92,514	158,850	555,911	496,891	60,388
3,600– 3,799	70,299	90,212	160,511	593,822	529,210	67,697
3,800– 3,999	76,192	91,375	167,567	653,585	581,414	78,172
4,000– 4,249	108,138	104,654	212,792	877,617	774,375	108,845
4,250– 4,499	119,771	90,439	210,210	919,481	803,909	118,155
4,500– 4,749	129,965	74,688	204,653	946,244	818,886	125,221
4,750– 4,999	137,519	60,808	198,327	966,564	828,276	131,242
5,000– 5,249	143,796	51,098	194,894	998,674	848,726	139,011
5,250– 5,499	148,683	42,456	191,139	1,027,219	866,700	146,663
5,500– 5,749	150,033	36,288	186,321	1,047,731	878,787	153,342
5,750– 5,999	146,463	29,187	175,650	1,031,643	859,922	154,368
6,000– 6,499	271,997	46,920	318,917	1,991,059	1,651,791	309,221
6,500– 6,999	237,400	35,542	272,942	1,840,098	1,519,188	299,369
7,000– 7,499	197,661	27,252	224,913	1,628,436	1,338,970	276,240
7,500– 7,999	162,383	21,743	184,126	1,424,961	1,168,210	251,450
8,000– 8,999	232,460	29,996	262,456	2,220,347	1,817,063	412,178
9,000– 9,999	150,278	19,754	170,032	1,608,644	1,316,106	318,122
10,000–14,999	256,120	39,612	295,732	3,486,192	2,898,365	795,326
15,000–19,999	60,203	11,312	71,515	1,218,061	1,049,342	352,614
20,000–29,999	31,781	5,716	37,497	887,061	788,145	329,827
30,000–49,999	10,270	1,755	12,025	441,421	406,109	204,826
50,000 and over	2,379	454	2,833	204,975	192,408	111,915
Office—						
New South Wales	1,227,016	707,402	1,934,418	10,848,470	9,278,825	1,907,813
Victoria	955,347	570,763	1,526,110	8,533,871	7,249,157	1,500,725
Queensland	491,691	253,442	745,133	4,027,010	3,410,152	685,855
South Australia	332,964	186,038	519,002	2,768,543	2,365,730	460,557
Western Australia	287,443	155,832	443,275	2,445,092	2,091,593	416,919
Tasmania	103,903	50,815	154,718	817,976	688,577	134,109
Northern Territory	16,929	8,818	25,747	158,347	123,386	25,424
Australian Capital Territory	43,399	28,202	71,601	480,176	410,904	96,336
Total	**3,458,692**	**1,961,312**	**5,420,004**	**30,079,486**	**25,618,324**	**5,227,738**

(*a*) Assessments in respect of 1973–74 incomes. Assessments issued after that date are not included. (*b*) Net income is 'Total assessable income less total deductions for expenses incurred in gaining assessable income'. (*c*) Taxable income is the income remaining after deductions from assessable income all allowable deductions.

Details of the number of individual taxpayers and net income tax assessed by grades of income for the income years 1971–72 to 1973–74 are shown in the following table.

FEDERAL INCOME TAX ASSESSMENTS: TAXABLE INDIVIDUALS, BY GRADE OF INCOME(*a*) (INCOME YEARS 1971-72 TO 1973-74)

	1971–72			*1972–73*		*1973–74*	
Grade of net income(a)	*Tax-payers*	*Net income tax assessed*	*Grade of net income(a)*	*Tax-payers*	*Net income tax assessed*	*Tax-payers*	*Net income tax assessed*
$ $	No.	$'000	$ $	No.	$'000	No.	$'000
1– 599	115,399	1,098	Under 1,200	60,889	2,212	60,344	2,235
600– 799	149,385	2,881	1,200– 1,399	107,348	6,777	98,876	6,271
800– 999	147,070	4,974	1,400– 1,599	128,419	10,393	106,045	8,957
1,000– 1,199	150,023	7,702	1,600– 1,799	139,931	14,063	112,957	11,877
1,200– 1,399	156,698	11,072	1,800– 1,999	144,579	17,920	119,456	15,134
1,400– 1,599	169,285	15,415	2,000– 2,199	154,334	23,147	134,047	19,219
1,600– 1,799	174,363	19,975	2,200– 2,399	162,679	29,125	141,597	23,572
1,800– 1,999	182,829	26,023	2,400– 2,599	168,304	35,129	141,360	27,729
2,000– 2,199	196.679	34,039	2,600– 2,799	177,015	42,419	143,344	32,925
2,200– 2,399	201,678	41,762	2,800– 2,999	180,490	48,868	145,391	38,411
2,400– 2,599	207,233	50,270	3,000– 3,199	186,795	56,457	149,067	44.994
2,600– 2,799	208,867	57,831	3,200– 3,399	190,587	63,716	153,618	52,222
2,800– 2,999	208,071	64,885	3,400– 3,599	193,855	70,987	158,850	60,388
3,000– 3,999	1,058,369	436,928	3,600– 3,799	193,507	76,839	160,511	67,697
4,000– 5,999	1,474,459	1,022,314	3,800– 3,999	189,861	81,290	167,567	78,172
6,000– 7,999	531,801	635,253	4,000– 4,249	233,341	108,430	212,792	108,845
8,000– 9,999	184,274	334,734	4,250– 4,499	225,352	114,390	210,210	118,155
10,000–19,999	153,845	532,945	4,500– 4,749	218,251	120,788	204,653	125,221
20,000–29,999	15,237	146,456	4,750– 4,999	206,590	124,259	198,327	131,242
30,000 and over	5,866	137,168	5,000– 5,249	191,094	124,494	194,894	139,011
			5,250– 5,499	175,858	124,190	191,139	146,663
			5,500– 5,749	158,623	120,957	186,321	153,342
			5,750– 5,999	139,807	114,676	175,650	154,368
			6,000– 6,499	232,368	210,342	318,917	309,221
			6,500– 6,999	184,468	189,487	272,942	299,369
			7,000– 7,499	139,415	160,778	224,913	276,240
			7,500– 7,999	107,151	138,036	184,126	251,450
			8,000– 8,999	150,535	224,083	262,456	412,178
			9,000– 9,999	91,752	164,984	170,032	318,122
			10,000–14,999	166,167	437,542	295,732	795,326
			15,000–19,999	43,810	214,125	71,515	352,614
			20,000–29,999	23,538	204,238	37,497	329,827
			30,000–49,999	7,677	128,284	12,025	204,826
			50,000 and over	1,862	77,902	2,833	111,915
Total	**5,691,431**	**3,583,725**	**Total**	**5,076,252**	**3,681,326**	**5,420,004**	**5,227,738**

(*a*) Net income is 'Total assessable income less total deductions for expenses incurred in gaining that income'.

Partnerships and trusts

Income tax returns are required to be lodged on behalf of partnerships and trusts which, as partnerships and trusts, are not required to pay tax except in certain specified circumstances when they may be assessed as individuals. In general, the net income remaining, after allowing all deductions including expenditure incurred in gaining the income, is distributed to the partners or beneficiaries concerned and is assessable for tax in the respective individual returns.

The following table shows for the 1973–74 income year numbers, total business income and net income of partnerships and trusts. Greater detail is published in the statistical supplement to the annual report of the Commissioner of Taxation and the report itself.

PARTNERSHIPS AND TRUSTS—INCOME YEAR 1973-74

Item		*Partnerships*	*Trusts*	*Total*
Number		447,461	120,618	568,079
Total business income	$'000	9,804,313	211,902	10,016,215
Net income(*a*)	$'000	3,813,179	388,053	4,201,232

(*a*) Total net income adjusted by subtraction of loss.

Taxes on income—companies

For taxation purposes companies are divided into two main groups—private and public. Broadly, a private company is defined as a company in which all the issued shares are held by not more than twenty persons, or which is capable of being controlled by not more than seven persons, and which is not a company in which the public is substantially interested, or is a subsidiary of a public company. All other companies are regarded as public companies. Both private and public companies pay primary tax assessed on a taxable income ascertained on the same principles as for individuals.

Dividends received are assessable income; resident companies, however, receive a rebate at the average rate on the amount of dividends included in the taxable income, while this rebate is not allowed to non-resident companies.

A private company is liable to pay additional tax upon the amount, if any, by which the dividends paid by the company within a prescribed period fall short of sufficient distribution as defined.

Rates of tax. The rates of primary income tax for all companies and additional tax for private companies applicable to income years 1959–60 to 1972–73 are shown in the following table.

RATES OF INCOME TAX: COMPANIES, 1959-60 TO 1972-73 INCOME YEARS

(Cents per $)

	Resident private company			*Resident public company(a)*		*Non resident company*			
	On taxable income		*Additional tax on un-distributed income*	*On taxable income*		*On dividends income*		*On other income*	
Income years ended June	*Up to $10,000*	*On re-mainder*		*Up to $10,000*	*On re-mainder*	*Up to $10,000*	*On re-mainder*	*Up to $10,000*	*On re-mainder*
1960 to 1963	25	35	50	35	40	30	40	35	40
1964 to 1967	27.5	37.5	50	37.5	42.5	32.5	42.5	37.5	42.5
1968 and 1969	30	40	50	40	45	35	45	40	45
1970	32.5	42.5	50	42.5	47.5	37.5	47.5	42.5	47.5
1971 and 1972	37.5	42.5	50	47.5	47.5	42.5	47.5	47.5	47.5
1973	45.0	45.0	50	47.5	47.5	47.5	47.5	47.5	47.5

(*a*) Excludes co-operative, non-profit and life insurance for which the rates of tax (in cents per $) for 1972–73 income year were:

	Taxable income	
Type of company	*Up to $10,000*	*On remainder*
Co-operative	42.5	47.5
Non-profit—Friendly societies' dispensaries	37.5	37.5
Other	42.5	47.5
Mutual life insurance	47.5	47.5
Other life insurance—Mutual income	47.5	47.5
Other income	47.5	47.5

For the income year ended 30 June 1974 the rate for companies other than friendly society dispensaries was 45 per cent, except that for the first $10,000 of taxable income of co-operative and non-profit companies (other than friendly society dispensaries) the rate was 42.5 per cent. The rate for friendly society dispensaries was 37.5 per cent.

For the income year ended 30 June 1975 the rate for companies other than friendly society dispensaries was 42.5 per cent and for friendly society dispensaries 37.5 per cent.

A non-profit company is not liable to income tax unless the taxable income exceeds $416. Where the non-profit company is a friendly society dispensary and the taxable income does not exceed $1,664 the maximum amount payable is one-half of the excess over $416 less any rebate or credit to which the company is entitled. Where the taxable income of a non-profit company other than a friendly society dispensary does not exceed $1,830, the tax payable by the company is limited to 55 per cent of the amount by which the taxable income exceeds $416 less any rebate or credit to which the company is entitled. Other companies are assessed for income tax if the taxable income is $1 or more.

Details in respect of company income tax assessments for the 1973–74 income year are shown in the following table.

FEDERAL INCOME TAX ASSESSMENTS: RESIDENT AND NON-RESIDENT COMPANIES BY GRADE OF INCOME AND OFFICE OF ASSESSMENT

(Income derived in the year 1973-74)

Grade of taxable income(a) ($) and office of assessment	*Taxable*			*Non-taxable*		
	Companies	*Taxable income (a)*	*Net income tax assessed (b)*	*Companies*	*Taxable income (a)(c)*	*Loss(d)*
	No.	$'000	$'000	No.	$'000	$'000
Loss for year	..	..	..	60,963	..	574,600
Nil	..	..	..	30,524	..	..
1– 1,999	36,617	21,445	9,048	5,064	3,727	..
2,000– 9,999	30,751	162,167	65,945	5,928	29,948	..
10,000– 19,999	14,795	210,993	85,597	2,026	28,634	..
20,000– 39,999	10,446	293,353	118,753	1,185	33,054	..
40,000– 99,999	7,624	470,974	189,926	662	40,517	..
100,000– 199,999	2,891	404,720	159,263	174	24,134	..
200,000– 399,999	1,620	451,798	174,384	103	29,057	..
400,000– 999,999	1,174	725,995	273,168	78	48,346	..
1,000,000–1,999,999	443	617,307	218,485	16	22,038	..
2,000,000 and over	457	3,422,386	1,075,830	12	59,866	..
New South Wales	46,150	2,289,408	831,231	50,464	127,198	299,291
Victoria	29,765	3,037,710	996,538	22.922	120,197	141,870
Queensland	11,701	673,409	243,219	11,387	21,936	73,507
South Australia	8,987	364,733	142,512	9,079	19,051	19,219
Western Australia	6,250	284,185	115,305	7,637	7,424	25,376
Tasmania	1,948	74,399	27,755	2,084	2,622	6,315
Northern Territory	472	9,538	3,936	465	740	3,429
Australian Capital Territory	1,546	47,754	9,901	2,697	20,154	5,595
Total	**106,819**	**6,781,137**	**2,370,397**	**106,735**	**319,323**	**574,600**

(*a*) Taxable income is the income remaining after deducting from assessable income all allowable deductions. (*b*) Excludes additional tax on the undistributed income of private companies. (*c*) Net tax assessed is nil because of rebates. (*d*) Not included in the figures shown for taxable income.

Yield of income taxes

Income taxes collected. The following table shows the net amounts of taxes collected and the proportions of the several components over recent years.

FEDERAL INCOME TAXES COLLECTED: COLLECTION YEARS 1970-71 TO 1974-75

Source of income tax	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
NET AMOUNTS COLLECTED ($'000)					
Individuals—					
Instalments—salaries and wages	2,432,062	2,888,547	3,160,681	4,238,391	6,071,293
Other payments	746,075	880,037	928,797	1,251,872	1,642,726
Companies	1,395,389	1,477,482	1,561,287	1,953,927	2,358,809
Withholding tax—Dividend	35,956	42,002	51,197	56,648	59,818
Interest	12,318	15,650	21,406	22,588	28,298
Total	**4,621,800**	**5,303,717**	**5,723,369**	**7,523,426**	**10,160,944**
PERCENTAGES					
Individuals—					
Instalments—salaries and wages	52.62	54.46	55.22	56.34	59.75
Other payments	16.14	16.59	16.23	16.64	16.17
Companies	30.19	27.86	27.28	25.97	23.21
Withholding tax—Dividend	0.78	0.79	0.89	0.75	0.59
Interest	0.27	0.30	0.37	0.30	0.28
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Refunds of revenue. Income tax collections, as previously shown, are net amounts after refunds of revenue made in the course of the year. Refunds are of two types—those charged to special appropriations under authority of the Income Tax Assessment Act and those charged to special appropriations under authority of the Audit Act. Income tax instalment refunds, by far the greatest part of income tax refunds, are made when the instalments deducted during the year exceed the tax assessed on incomes for that year. Refunds made from special appropriations under section 37A of the Audit Act include refunds of moneys paid to the revenue in error, refunds of tax overpaid, refunds due to the amendment of assessments, etc. Refunds of income tax to individuals during the collection years 1970–71 to 1974–75 were: 1970–71, $594,748,000; 1971–72, $697,057,000; 1972–73, $723,226,000; 1973–74, $862,760,000, and 1974–75, $967,924,000.

Estate duty

Under the *Estate Duty Assessment Act* 1914 estate duty is assessed on the net value of the estate less a statutory exemption determined in accordance with the following formula: (*a*) where the whole of the estate passes to the widow, widower, children (including adopted children, stepchildren and ex-nuptial children) or grandchildren of the deceased person: (i) for qualifying estates of deceased primary producers—$48,000; (ii) for other estates—$40,000; decreasing by $2 for every $8 by which the value of the estate exceeds $48,000 or $40,000 as the case may be; (*b*) where no part of the estate passes to the relatives mentioned in (*a*): (i) for qualifying estates of deceased primary producers—$24,000; (ii) for other estates—$20,000; decreasing by $2 for every $8 by which the value of the estate exceeds $24,000 or $20,000 as the case may be; and (*c*) where part only of the estate passes to the relatives mentioned in (*a*): an amount calculated proportionately under (*a*) and (*b*) above. For estates of persons domiciled in Australia at the time of death, and who died after 30 April 1974, a deduction of up to $35,000 may also be allowed where an interest in the matrimonial home passes to a surviving spouse.

As a general rule, the estate of a deceased primary producer would qualify for the higher level of statutory exemption if: (i) the death occurred on or after 25 September 1969; (ii) the deceased person was domiciled in Australia at the time of his death; (iii) during the period of five complete income tax years preceding death, more than one-half of the deceased person's gross income was derived from the carrying on by him of a primary production business in Australia; and (iv) the gross value of rural property in Australia—being land and certain other types of assets used in a primary production business such as livestock and agricultural plant—exceeded the gross value of all other property in the estate. In specified circumstances, dividends and certain other receipts from a family proprietary company in which a deceased person held shares may be treated as income derived from the carrying on by him of a primary production business and the value of the shares may be included, either wholly or in part, in the value of the estate's rural property.

Special exemptions are also allowed in respect of estates of defence personnel who die on active service or within three years of termination of their active service from injuries received or diseases contracted while on active service, and prescribed personal property held in Australia by certain United States personnel who are in Australia solely for purposes connected with projects of the United States Government.

A 'quick succession' rebate of estate duty may be allowable if the deceased was a beneficiary in an estate (upon which duty is payable or has been paid) of a person who pre-deceased him by not more than five years.

A 'rural property' rebate of part of any estate duty attributable to rural property included in the estate of a deceased primary producer may be allowable if the value of the estate (before deducting any statutory exemption) is less than $250,000 and certain conditions are satisfied. The conditions are the same as those governing entitlements to higher levels of statutory exemptions for estates of deceased primary producers, as outlined in the explanations relating to statutory exemptions. If the value of a qualifying estate does not exceed $140,000, the rebate is fifty per cent of any duty attributable to rural property in Australia. Rates of rebate gradually reducing from fifty per cent are applicable to estates having net values between $140,000 and $250,000.

The rates of duty have remained unchanged since 1941 and increase as the value of the estate for duty increases, as follows: does not exceed $20,000, 3 per cent; $20,001 to $40,000, 3 per cent to 6 per cent; $40,001 to $240,000, 6 per cent to 26 per cent; $240,001 to $1,000,000, 26 per cent to 27.9 per cent; $1,000,000 or more, 27.9 per cent.

Particulars of the number and value of dutiable estates and duty assessed, for recent assessment years 1970–71 to 1974–75 are given in the following table.

FEDERAL ESTATE DUTY ASSESSMENTS

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Estates	No.	16,502	18,505	16,734	12,052	13,621
Gross value as assessed	$'000	993,610	1,045,418	969,778	964,804	1,183,913
Deductions(*a*)	,,	168,396	192,017	176,324	194,159	242,912
Statutory exemption	,,	179,419	209,377	202,793	238,212	318,706
Dutiable value	,,	645,791	644,024	590,660	532,433	622,295
Net duty assessed	,,	80,551	71,750	64,366	65,981	80,560
Average dutiable value	$	39,134	34,803	35,297	44,178	45,686
Average duty assessed per estate	$	4,881	3,877	3,846	5,475	5,914

(*a*) Debts, Exempt Estate and State Probate Succession Duties.

Gift duty

The *Gift Duty Act* 1941 and the *Gift Duty Assessment Act* 1941 impose a gift duty on gifts which are defined as dispositions of property made otherwise than by will, without adequate consideration in money or money's worth. There is a liability on both the donor and the donee to furnish a return, and both are jointly and severally liable for payment of the duty. However, if a return is furnished by the donor, the donee is relieved of this obligation.

Certain exemptions from duty are provided, the more important being: payments to an employees' superannuation or like fund; retiring allowances or gratuities granted to employees; gifts to organisations not carried on for the profit of any individual; gifts to the Commonwealth Government or a State; and small gifts not exceeding $100.

The rate of gift duty applicable to any particular gifts is fixed by reference to the total value of all gifts made by the same donor within the period of eighteen months before and eighteen months after the time of making that gift. Where the total value of all gifts as defined does not exceed $10,000 no duty is payable. The present rates of duty are (*a*) $10,001 to $20,000, 3 per cent provided that the gift duty payable shall not exceed one half of the amount by which the gift exceeds $10,000 or a proportionate amount where more than one gift is involved; (*b*) $20,001 to $40,000, 3 per cent to 6 per cent; (*c*) $40,001 to $240,000, 6 per cent to 26 per cent; (*d*) $240,001 to $1,000,000 and over, 26 per cent to 27.9 per cent.

Particulars of the number of gift duty assessments, value of gifts as assessed and duty assessed for recent assessment years are given in the following table.

FEDERAL GIFT DUTY ASSESSMENTS

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Assessments . . .	No.	9,740	10,425	7,199	6,976	7,514
Value as assessed . . .	$'000	147,677	172,244	130,875	199,454	297,020
Duty assessed . . .	„	7,796	9,878	7,158	18,037	36,077

Australian Capital Territory Stamp Duty and Tax

Stamp duty and tax on a range of instruments and transactions connected with the Australian Capital Territory, including Jervis Bay, came into operation on 1 July 1969.

The Australian Capital Territory Taxation (Administration) Act 1969 provides for the administrative procedures necessary for assessment and collection of duty and tax.

Six additional Acts specify the range of dutiable instruments or transactions subject to duty or tax which are as under:

Cheques and other bills of exchange and promissory notes: Five cents on each.

Hire purchase agreements: 1¼ per cent of the purchase price (if over $100) after excluding any deposit and any terms or insurance charges.

Insurance business: Five per cent of premiums other than for life assurance, third party motor vehicles insurance or workers' compensation insurance.

Sales and purchases of marketable securities: Effected through a broker for full sale value. Up to $100–7 cents for each $25.00 or part thereof. Over $100–30 cents for each $100 or part thereof. The rate applies to the sale price and/or purchase price payable by the seller and purchaser respectively.

Transfer of marketable securities not through a broker: 15 cents for every $25.00 of the value or part thereof.

Leases and realty: Transfers of freehold or leasehold interests in land situated in the Territory—at the rate of $1.00 per $100 (or part thereof) of the value of the interest in the land transferred.

Grant of lease: 30 cents for every $100 rent or part thereof and if any other consideration not being rent—$1.00 for every $100 or part thereof of that other consideration.

A general exemption is provided from all duties for public hospitals, public benevolent institutions, religious institutions, public educational institutions and for visiting diplomatic personnel and their families. The total amount collected as Australian Capital Territory Stamp Duty and Tax was $3,589,000 in 1972–73, $3,995,000 in 1973–74 and $3,433,000 in 1974–75.

Customs duties

A description of the Australian Customs Tariff System is given in Chapter 11, Overseas Transactions. Details of duties collected on the import of commodities classified in accordance with the "Brussels Nomenclature" are given in the following table.

NET CUSTOMS DUTIES ACCORDING TO BRUSSELS TARIFF DIVISIONS
($'000)

Brussels Tariff Division	*Source of receipts*	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
1	Live animals; animal products . . .	1,251	1,114	1,318	983	877
2	Vegetable products	1,442	1,507	1,540	2,067	969
3	Animal and vegetable fats and oils and their cleavage products; prepared edible fats; animal and vegetable waxes . . .	1,987	1,184	1,481	929	156
4	Prepared foodstuffs; beverages, spirits and vinegar; tobacco	64,215	69,975	76,556	101,161	133,875
5	Mineral products	13,715	7,759	14,278	9,083	9,013
6	Products of the chemical industry and allied industries	16,002	14,625	14,967	12,045	13,008
7	Artificial resins and plastic materials, cellulose esters and ethers, and articles thereof; rubber, synthetic rubbers, factice and articles thereof	22,388	20,990	26,595	26,751	32,695
8	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of gut (other than silk-worm gut)	3,842	4,349	4,619	5,588	6,401
9	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto and of other plaiting materials; basketware and wickerwork .	9,182	9,025	10,401	12,509	11,979
10	Paper-making material; paper and paperboard and articles thereof . . .	11,353	11,165	12,392	13,368	13,306
11	Textiles and textile articles . . .	59,129	68,994	75,380	96,890	107,836
12	Footwear, headgear, umbrellas, sunshades, whips, riding-crops and parts therefor; prepared feathers and articles made therewith; artificial flowers; articles of human hair; fans	10,437	11,741	11,433	14,845	18,129
13	Articles of stone, of plaster, of cement, of asbestos, of mica and of similar materials; ceramic products; glass and glassware .	11,193	11,982	12,607	13,269	15,797
14	Pearls, precious and semi-precious stones, precious metals, rolled precious metals, and articles thereof; imitation jewellery; coin	1,997	2,000	2,282	3,170	4,758
15	Base metals and articles of base metal .	34,315	28,254	33,229	30,219	40,047
16	Machinery and mechanical appliances; electrical equipment; parts therefor . .	98,229	96,610	93,971	110,755	188,323
17	Vehicles, aircraft, and parts therefor; vessels and certain associated transport equipment	64,353	66,249	75,076	101,213	175,540
18	Optical, photographic, cinematographic measuring, checking, precision, medical and surgical instruments and apparatus; clocks and watches, musical instruments; sound recorders and reproducers; television image and sound recorders and reproducers, magnetic; parts therefor .	15,786	16,173	16,887	18,353	19,911
19	Arms and ammunition; parts therefor .	483	348	361	368	457
20	Miscellaneous manufactured articles . .	11,656	12,228	14,362	17,640	21,167
21	Works of art, collectors' pieces and antiques	12	−31	35	52	79
	Miscellaneous	6,750	7,063	7,535	10,318	19,819
	Primage	6,285	5,457	6,109	2,882	6,391
	Total customs duties and primage .	*466,003*	*468,761*	*513,414*	*604,458*	*840,535*
	Less Remission of duty under special circumstances.	15	29	33	15	20
	Total	**465,989**	**468,732**	**513,381**	**604,443**	**840,515**

Excise duties

Details of duties collected in relation to the production of specific commodities are given in the following table.

FEDERAL EXCISE REVENUE: CLASSIFICATION OF NET RECEIPTS
($'000)

Source of revenue	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Beer	382,479	398,330	419,954	462,400	475,963
Spirits, liquers, etc.	25,923	27,180	30,501	46,037	62,847
Tobacco	15,450	16,979	15,584	16,703	18,358
Cigars and cigarettes	257,034	291,087	312,780	375,210	453,739
Cigarette papers	859	908	845	845	806
Petrol	328,584	420,856	438,486	595,313	642,183
Diesel fuel	30,815	38,352	42,399	56,215	60,319
Matches	2,289	2,519	2,677	2,717	2,357
Playing cards	134	149	148	160	149
Grape wine	8,702	11,516	3,275	..	..
Coal	1,436	1,777	2,032	2,199	2,586
Canned fruit	333	303	312	368	326
Miscellaneous	−268	3,294	−330	−3,521	9,399
All items	*1,053,770*	*1,213,250*	*1,268,663*	*1,554,646*	*1,729,032*
Diesel fuel taxation	425	481	511	759	660
Less rebates	567	668	885	824	1,062
	−142	−187	−374	−65	−401
Other rebates	−15	−7	..	..	−11
Total	**1,053,613**	**1,213,056**	**1,268,289**	**1,554,581**	**1,728,621**

The quantities of commodities on which excise duty were paid are given in Chapter 11, Overseas Transactions, page 350.

Sales Tax

The general rate of tax levied on all goods other than those specified in the schedules to the *Sales Tax (Exemptions and Classifications) Act* 1935 is 15 per cent and goods subject to special rates are taxed at either 2.5 per cent or 27.5 per cent. Prior to 19 August 1970 these special rates were 2.5 per cent and 25 per cent.

Particulars of the sales of taxable goods in each rate class in each State for 1973–74 are given in the following table. The figures relate to sales during the period 1 July to 30 June.

FEDERAL SALES TAX: SALE VALUE OF TAXABLE GOODS INCLUDED IN RETURNS IN EACH RATE CLASS, 1973-74

	Gross sales of goods taxable at various rates				
State	*2½%*	*15%*	*27½%*	*Other*	*Total*
	$'000	$'000	$'000	$'000	$'000
New South Wales and A.C.T.	563,667	1,378,443	673,131	8,349	2,623,590
Victoria	506,233	921,692	428,606	15,486	1,872,017
Queensland	169,600	441,792	196,959	5,326	813,677
South Australia	118,252	266,271	141,012	2,759	528,294
Western Australia	95,215	224,408	108,863	1,529	430,015
Tasmania	24,529	51,996	29,571	290	106,386
Northern Territory(*a*)	1,374	6,890	1,894	1,218	11,376
Australia(*a*)	**1,478,870**	**3,291,492**	**1,580,036**	**34,957**	**6,385,355**

(*a*) Estimated. Northern Territory details are not available for April to June 1974.

Sales of taxable goods and sales tax payable for Australia are shown in the following table for recent years. The figures for sales tax payable differ from those for net collections shown on page 579 because the latter include some adjustments in respect of earlier tax years and relate to tax payable on returns lodged during the year, which in general cover sales for the period June to May.

FEDERAL SALES TAX: SALE VALUE OF GOODS INCLUDED IN RETURNS AND COLLECTIONS

$'000

Year of sale	*Gross taxable sales*	*Estimated net taxable sales(a)*	*Taxation Office*	*Bureau of Customs*	*Total*
	(*b*)	(*b*)			
1970–71	4,132	3,940	610	23	633
1971–72	4,428	4,234	661	22	683
1972–73	4,996	4,798	741	24	765
1973–74	6,606	6,293	935	34	969
1974–75	7,677	7,293	1,103	51	1,154

(*a*) Represents gross taxable sales less discounts, goods returned, bad debts and other adjustments. (*b*) Statistics obtained from returns lodged at Taxation Office.

In the foregoing tables, sales include goods transferred to stock for sale by retail, goods imported by persons other than registered taxpayers, and goods used in the business of the taxpayer. Exempt sales relate to goods exempted from sales tax under the *Sales Tax (Exemptions and Classifications) Act* 1935. The figures shown do not represent the total sales of all commodities, as vendors trading only in exempt goods are not required to be registered, and consequently the volume of their sales is not included in the statistics above. In addition, non-taxable sales (i.e. goods sold by one registered taxpayer to another registered taxpayer) are excluded.

Primary production taxes and charges

The following section shows current rates of charges, and receipts from, primary production and other charges. Further information relating to primary production charges is given in Chapter 22, Rural Industry.

Wheat export charge and wheat tax. For details *see* Chapter 22, Rural Industry.

Wool tax. The rate of wool tax applicable to transactions in wool in the period 2 September 1974 to 18 August 1975 was 7.75 per cent. From 19 August 1975 the rate has been 8 per cent.

Miscellaneous export charges. These consist of charges levied on exports of apples and pears (*Apple and Pear Export Charges Act* 1928), canned fruits (*Canned Fruits Export Charges Act* 1926), dried fruits (*Dried Fruits Export Charges Act* 1924), and eggs (*Eggs Export Charges Act* 1947).

Tobacco charge. The rates of tobacco charge currently in force are as follows:

- (*a*) in respect of leaf grown in Australia and sold to a manufacturer:
    - (i) 1.1 cents per kilogram of leaf, payable by the grower or other persons who own the leaf immediately before sale, and
    - (ii) 2.2 cents per kilogram of leaf, payable by the manufacturer;
- (*b*) in respect of leaf grown and used by grower-manufacturers:
    - (i) where the manufacturer grows nine-tenths of the Australian tobacco leaf used by him—1.1 cents per kilogram of leaf,
    - (ii) in other cases—2.2 cents per kilogram of leaf.

(*See also* Chapter 22, Rural Industry.)

Butter fat levy. The *Butter Fat Levy Act* 1965 provides for a maximum rate of $0.48 per hundredweight of butterfat content of specified dairy produce and for the apportionment of the proceeds between overseas marketing (50 per cent) and local promotion (50 per cent). (*See also* Chapter 22, Rural Industry.)

Dairy Research Levy. The Dairying Research Levy Act 1972 came into operation on 1 July 1972. It imposes a levy on all whole milk produced in Australia and is payable either on a butterfat or gallonage basis, according to the normal method of payment to producer by the purchaser. The present operative rates of levy are 10 cents per hundredweight butterfat (0.24 cents per kilogram) or 0.033 cents per gallon milk (7.3 cents per 1000 litres).

Canning-fruit charge. The present rate of canning-fruit charge is $1.00 per tonne of fruit. This rate has operated since 1 December 1973.

Honey levy. The current rate of levy on honey sold for domestic consumption in Australia is 0.5 cents per pound.

Livestock slaughter levy. The present operative rate of levy for cattle is 46 cents per head of which 25 cents is for beef research, 1 cent for research into the meat processing industry and 20 cents to finance the operations of the Australian Meat Board. For sheep and lambs the levy is 3.85 cents per head and the components are 1.75 cents for sheep meat research, 0.1 cents for research into the meat processing industry and 2.00 cents for the Australian Meat Board.

Poultry industry levy. The rates of levy for each hen kept for commercial purposes (the first twenty hens being exempt) were 4.0 cents per fortnight from 1 July 1971 to 8 June 1972, nil per fortnight from 9 June 1972 to 30 June 1972 and 4.0 cents per fortnight from 1 July 1972.

Chicken meat levy. The rate of levy is 10 cents per hundred meat chickens hatched, payable by any hatchery with 20,000 chickens or more.

Pig slaughter levy. The present operative rate of levy is 5 cents for each pig slaughtered for human consumption.

Wine grapes charges. The *Wine Grapes Charges Act* 1929 imposes a levy, which is payable by the owner of a winery or distillery, on all grapes delivered to that winery for use in the manufacture of wine. No charge is payable unless 10 tonnes or more of grapes have been used in the manufacture of wine during a season. The operative rate of charge as from 25 January 1973 is $2.40 per tonne of fresh grapes and $7.20 in respect of dried grapes.

Dried vine fruits levy. The *Dried Vines Fruits Levy Act* 1971 imposes a levy on dried vine fruit where the average return for a season exceeds by more than $10 the amount per ton that constitutes the base price for that season, with a maximum of $20 per ton.

Apple and pear stabilisation export duty. The *Apple and Pear Stabilisation Export Duty Act* 1971 imposes an export duty on the exportation on consignment of fruit of a season where the average export return for a season exceeds the support price for that season. The maximum rate of export duty is 80 cents per reputed bushel.

Dried fruits levy. The *Dried Fruits Levy Act* 1971 imposes a levy on dried fruits of a season received for packing. The rate of levy is in the case of dried vine fruits 50 cents per ton and in the case of dried tree fruits $2.50 per ton.

FEDERAL PRIMARY PRODUCTION TAXES AND CHARGES RECEIPTS
($'000)

Source of revenue	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Apple and pear export charge	386	408	431	347	352
Butterfat levy	2,184	2,133	1,731	1,673	1,604
Canned fruit export charge	427	342	387	292	176
Canning fruit charge	218	171	136	183	108
Dairy research levy	..	..	490	512	501
Dried fruits export charge	232	267	309	87	105
Dried fruits levy	..	46	70	44	42
Dried vine fruits levy	..	..	..	..	155
Egg export charge	4	4	4	4	2
Honey levy	108	122	120	129	190
Livestock slaughter levy—					
Cattle	1,811	2,432	3,194	2,848	3,289
Pigs	..	144	232	215	175
Sheep and lambs	1,409	1,932	1,637	908	1,086
Meat export charge—					
Cattle meat	..	..	..	5,669	14,858
Other meat	..	..	..	967	2,259
Chicken meat levy	114	118	118	146	139
Poultry industry levy	12,819	13,038	12,978	11,612	12,872
Tobacco charge	502	567	510	535	505
Wheat export charge	..	..	..	9,843	38,678
Wheat tax	607	712	639	1,104	1,180
Wine grapes charges	534	513	689	792	864
Wool tax	5,567	5,496	11,171	26,531	64,288
Total	**26,922**	**28,445**	**34,846**	**64,441**	**143,428**

Pay-roll tax

Federal pay-roll tax came into operation on 2 May 1941 and provided for the imposition of a tax on wages paid or payable in respect of any period of time occurring after 30 June 1941. The tax was payable by employers on all wages and salaries paid or payable in excess of a general exemption. The rate of tax, 2.5 per cent, was unchanged since its inception but the general exemption was increased over the years from $173.33 to $1,733.33 per month ($2,080 per annum to $20,800 per annum).

From 1 September 1971, in accordance with an agreement between the Commonwealth Government and the States following the June 1971 Premiers' Conference, the Commonwealth Government vacated the pay-roll tax field in favour of the States. It continued, however, to impose pay-roll tax in the Australian Capital Territory and the Northern Territory. The laws relating to pay-roll tax in the Territories are the *Pay-roll Tax (Territories) Assessment Act* 1971 and the *Pay-roll Tax (Territories) Act* 1971.

Since December 1974 the rate of tax payable in the Territories is 5 per cent with a statutory exemption of wages up to $1,733.33 per month ($20,800 per annum) or a proportion of that amount in the case of an employer who is an employer also in a State.

On vacating the pay-roll tax field in favour of the States the Commonwealth Government introduced an export incentive grant scheme to provide grants in respect of the 1971–72 and 1972–73 financial years equal to the rebates which would have been payable for those years if the pay-roll tax rebate scheme which had operated from the 1960–61 financial year had continued in operation until it expired on 30 June 1974.

Gross collections of pay-roll tax in 1974–75 amounted to $15,712,576. Refunds of pay-roll tax during 1974–75 under the pay-roll tax rebate scheme amounted to $874,648. For details of the pay-roll tax rebate scheme, see page 553 of the Official Year Book No. 57.

Stevedoring Industry Charge

The rates in operation from 13 February 1976 have been as follows:

Class of Waterside Worker	*Rate* $
A	4 00 per man-hour
B	4.75 per man-hour
C	2.85 per man-hour

Class A waterside workers are permanent waterside workers in permanent and continuous ports. Class B are regular casual waterside workers in continuous ports and Class C are regular casual waterside workers in non-continuous and seasonal ports and irregular workers in all ports.

Taxes levied in the Territories

Northern Territory. Taxes levied by the Commonwealth Government in the Northern Territory in the past five years were as follows.

NORTHERN TERRITORY: TAXATION BY TYPE OF TAX
($'000)

Type of tax	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Rates on land	698	1,040	1,099	1,227	1,647
Vehicle registration fees	583	709	736	776	741
Drivers', etc., licences(*a*)	63	75	79	83	90
Liquor taxes(*a*)	366	443	486	589	568
Payroll taxes	..	1,900	1,950	2,800	5,300
Racing taxes	96	112	117	222	202
Fees from regulatory services, n.e.i.	312	302	304	353	323
Stamp duties	176	158	184	330	259
Other taxes, fees, fines, etc.	166	282	310	403	358
Total taxation	**2,460**	**5,021**	**5,265**	**6,783**	**9,488**

(*a*) Estimated.

Australian Capital Territory. Taxes levied by the Commonwealth Government in the Australian Capital Territory in the past five years were as follows.

AUSTRALIAN CAPITAL TERRITORY: TAXATION BY TYPE OF TAX
($'000)

Type of tax	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Rates on land	1,383	4,362	5,166	6,134	7,135
Vehicle registration fees	937	1,090	1,236	1,818	2,751
Drivers', etc., licences	101	129	119	580	623
Liquor taxes	340	390	459	589	710
Payroll taxes	..	1,967	3,153	4,805	10,210
Fees from regulatory services, n.e.i.	150	161	535	576	625
Stamp duties	2,475	2,561	3,589	3,995	3,433
Other taxes, fees, fines, etc.	28	15	304	112	104
Total taxation	**5,414**	**10,675**	**14,561**	**18,609**	**25,591**

Rates on land and stamp duties (*see also* page 594) are the principal taxes levied in the Australian Capital Territory.

Gross operating surplus of public enterprises

The *gross operating surplus* of public *trading* enterprises is the excess over working expenses of total revenue from charges before providing for capital consumption and other costs of capital (i.e. interest, debt redemption) *Financial* enterprises do not charge directly, at least not in full, for the services they render; that expenditure is largely financed by net receipts of interest and other transfer income. By convention, the output of these enterprises is valued at cost, so that no operating surplus is recorded in their production accounts. The profits of these enterprises are attributable to their property income. *Income* (including depreciation) of public financial enterprises is therefore arrived at after deducting interest paid and working expenses (i.e. net current expenditure on goods and services) from total receipts of interest and non-dwelling rent.

In the following table the revenue, working expenses and gross operating surplus of public trading enterprises are shown; public financial enterprises are reflected simply on the basis of their income (including depreciation). Further information relating to the more important of these enterprises may be found in the chapters dealing with banking, housing, railways, electric power generation, etc.

PUBLIC TRADING ENTERPRISES: REVENUE, WORKING EXPENSES AND GROSS OPERATING SURPLUS, CLASSIFIED BY INDUSTRY

($ million)

Industry	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
REVENUE					
Manufacturing	19.4	21.8	23.4	28.5	34.0
Electricity	48.5	52.1	61.1	66.8	76.0
Water supply, sewerage and drainage	2.0	3.4	4.3	5.0	5.0
Transport and communication—					
Air transport	331.8	333.7	389.9	481.6	590.8
Rail transport	29.0	29.2	31.2	37.2	41.4
Sea transport	70.2	79.4	93.0	113.4	145.4
Urban transit systems	6.9	7.6	7.7	8.9	9.3
Communication	755.8	901.3	983.3	1,162.7	1,444.0
Total	*1,193.7*	*1,351.1*	*1,505.1*	*1,803.9*	*2,230.9*
Commerce	45.5	102.0	64.5	52.2	43.4
Property and business services—					
Housing	18.9	16.9	15.8	20.9	22.1
Other	6.6	8.1	9.1	11.8	18.7
Total	*25.5*	*25.1*	*24.9*	*32.7*	*40.8*
Community social and personal services	9.4	10.0	10.3	11.8	16.8
Total revenue	1,344.0	1,565.4	1,693.6	2,000.8	2,446.9
WORKING EXPENSES(*a*)					
Manufacturing	18.0	21.2	21.9	28.5	35.0
Electricity	11.5	13.0	14.3	18.6	29.3
Water supply, sewerage and drainage	2.0	2.3	2.6	3.1	3.9
Transport and communication—					
Air transport	287.3	290.1	328.1	411.8	548.7
Rail transport	24.9	26.7	29.2	38.8	50.6
Sea transport	60.4	68.7	75.1	95.5	136.7
Urban transit systems	6.0	6.6	7.0	9.8	12.3
Communication	486.8	540.2	608.5	778.0	986.3
Total	*865.5*	*932.3*	*1,047.8*	*1,333.8*	*1,734.6*
Commerce	42.1	107.0	69.3	54.1	68.6
Property and business services—					
Housing	17.6	15.5	14.1	17.9	21.4
Other	6.1	7.7	8.4	11.0	18.2
Total	*23.7*	*23.2*	*22.5*	*28.9*	*39.6*
Community social and personal services	6.7	7.1	7.7	9.0	13.9
Total working expenses	969.4	1,106.1	1,186.3	1,476.1	1,924.8
GROSS OPERATING SURPLUS					
Manufacturing	1.5	0.6	1.5	−0.1	−0.1
Electricity	37.0	39.1	46.8	48.2	46.7
Water supply, sewerage and drainage	..	1.0	1.7	1.9	1.1
Transport and communication—					
Air transport	44.6	43.5	61.8	69.8	42.0
Rail transport	4.0	2.5	2.1	−1.6	−9.2
Sea transport	9.8	10.7	17.9	18.0	8.7
Urban transit systems	0.9	1.0	0.7	−0.8	−3.0
Communication	269.0	361.0	374.8	384.7	457.7
Total	*328.3*	*418.7*	*457.2*	*470.1*	*496.3*
Commerce	3.4	−4.9	−4.9	−1.9	−25.1
Property and business services—					
Housing	1.3	1.4	1.7	3.0	0.7
Other	0.5	0.5	0.7	0.7	0.5
Total	*1.8*	*1.9*	*2.5*	*3.7*	*1.2*
Community, social and personal services	2.7	2.8	2.6	2.8	2.9
Total gross operating surplus	374.6	459.3	507.3	524.7	522.1

(*a*) Excludes depreciation and interest charges.

STATE AUTHORITIES

The State authorities dealt with in this section include the central government of each State, statutory bodies created by or under State legislation to carry out activities on behalf of the central government, and incorporated organisations in which individual State governments have a controlling interest.

The transactions of many of the State authorities are itemised in State Consolidated Revenue Funds or in Trust Funds, so that a satisfactory coverage of their transactions can be obtained from a detailed analysis and reclassification of the published accounts whose receipts and payments are summarised in the statement of Treasury balances for each State. The remaining statutory bodies and other publicly owned or controlled organisations maintain accounts entirely, or largely separate from the public accounts although there may be transactions between them and State governments (such as advances and capital contributions, interest and dividends, and votes for running expenses and capital works) which would affect the public accounts. The accounting reports of this group of organisations have to be collected and analysed in order to present a complete statement of the transactions of State authorities—or at least methods of analysis need to be adopted which adequately reflect their transactions so that they are, in principle, covered by the statistics. In the figures which follow in this section all expenditure by State central government authorities on certain institutions, whether direct (e.g. new building charged to Loan Fund) or indirectly by way of current or capital grants to the bodies administering them, has been treated as final expenditure on goods and services by State authorities; fees and gifts from persons or private businesses to these institutions are not included, and neither is the expenditure of the institutions from their own resources. Universities and hospitals are particular examples of organisations for which this practice has been adopted.

Many of these State authorities have been granted autonomy by State legislatures to the extent that they are largely financially independent. Some of these are funded from earmarked tax revenues and are vested with independent borrowing powers. A considerable number of others belong to the category of public enterprises, since they are able to charge for their services so as to cover their costs of operation. These bodies have usually been created to control a specific activity or provide a specific service within a State. It is often the case that in other States similar activities are carried out, or services are provided, by central government or local authorities. Details of the activities of autonomous or semi-autonomous State authorities engaged in construction and maintenance of roads and bridges, provision of water supply and sewerage services, and harbour facilities, are given in the last part of this chapter. Information on the activities of other State authorities engaged in such fields as transport, electricity and gas, housing and banking may be found in chapters relevant to those subjects.

Details of the transactions of State authorities are given in the tables which follow. Reference should be made to the introduction of *Public Authority Finance, State and Local Authorities*, 1973–74, for definitions and descriptions of items appearing in these tables, and also for further details of the organisations covered by the figures. Additional information relating to the activities of the State authorities may also be found in the Year Books of the individual States.

Receipts and outlay

The receipts and outlay of State authorities for the five year period ended 1974–75 are given in the following table.

STATE AUTHORITIES(*a*): RECEIPTS AND OUTLAY

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
OUTLAY					
Final consumption expenditure	2,031.7	2,393.5	2,834.8	3,625.2	5,239.3
Gross capital formation—					
Increase in stocks	9.5	8.2	1.7	15.9	55.1
Expenditure on new fixed assets	1,696.6	1,877.6	2,003.6	2,258.3	3,265.9
Expenditure on existing assets (net)	60.9	111.8	82.6	179.2	236.6
Total gross capital formation	*1,767.1*	*1,997.7*	*2,087.8*	*2,453.4*	*3,557.5*
Transfer payments—					
Interest	725.3	817.7	876.6	934.6	1,030.7
Transfers to persons	98.8	132.0	164.9	178.8	197.7
Subsidies	25.7	28.7	27.5	30.1	37.6
Transfers overseas	0.3	0.3	0.3	0.3	0.3
Grants for private capital purposes	24.3	25.0	31.0	43.4	72.0
Grants to local authorities	95.2	118.7	168.4	150.4	260.6
Total transfer payments	*969.6*	*1,122.3*	*1,268.8*	*1,337.6*	*1,598.8*
Net advances—					
To the private sector	83.0	90.2	57.0	41.7	150.9
To public financial enterprises	35.4	38.0	50.7	60.7	82.9
To local authorities	1.8	2.0	3.2	5.9	17.3
Total net advances	*120.1*	*130.2*	*110.9*	*108.2*	*251.1*
Total outlay	**4,888.6**	**5,643.7**	**6,302.4**	**7,524.3**	**10,646.8**
of which—					
current outlay	3,001.3	3,515.8	4,103.6	4,962.8	6,838.1
capital outlay	1,887.2	2,127.9	2,198.7	2,561.6	3,808.6
RECEIPTS AND FINANCING ITEMS					
Receipts—					
Taxes, fees, fines, etc.	1,006.2	1,411.1	1,775.5	2,201.2	2,781.8
Income from public enterprises	373.7	406.3	361.9	285.8	204.8
Interest, etc., received	205.3	221.5	246.3	306.4	407.9
Grants from the Commonwealth Government—					
for current purposes	1,671.3	1,768.8	2,075.9	2,533.4	3,735.0
for capital purposes	553.7	625.8	706.2	898.6	1,409.7
Total receipts	*3,810.2*	*4,433.5*	*5,165.9*	*6,225.4*	*8,539.3*
Financing items—					
Net borrowing—					
Public corporation securities	238.2	339.0	301.5	335.8	396.3
Other general government securities	57.1	55.1	41.6	61.7	69.8
Advances from the Commonwealth Government (net)—					
For loan works purposes	366.4	549.6	601.3	447.9	592.1
Other	156.4	40.5	66.3	300.6	632.8
Net receipts of private trust funds	50.2	65.8	92.9	101.9	152.5
Reduction in cash and bank balances	−104.8	−80.6	−222.9	−293.8	−11.9
Reduction in security holdings	20.5	−66.5	−76.1	−50.2	−75.0
Other funds available (including errors and omissions)—					
Depreciation allowances	227.7	252.5	270.6	293.0	271.3
Other	66.7	54.7	61.3	101.9	79.6
Total financing items	*1,078.4*	*1,210.2*	*1,136.5*	*1,298.9*	*2,107.5*
Total funds available	**4,888.6**	**5,643.7**	**6,302.4**	**7,524.3**	**10,646.8**

(*a*) Excludes financial enterprises.

The following table provides details of the receipts and outlay of State authorities in each of the six States.

STATE AUTHORITIES(a): RECEIPTS AND OUTLAY, BY STATE, 1974–75

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
OUTLAY							
Final consumption expenditure	1,866.0	1,347.1	745.5	518.2	534.6	227.9	5,239.3
Gross capital formation—							
Increase in stocks	16.5	15.5	4.5	3.3	12.6	2.6	55.1
Expenditure on new fixed assets	1,086.7	864.2	516.6	331.7	340.1	126.5	3,265.9
Expenditure on existing assets (net)	80.0	98.6	−1.6	45.5	13.6	0.7	236.6
Total gross capital formation	*1,183.2*	*978.3*	*519.6*	*380.4*	*366.3*	*129.8*	*3,557.5*
Transfer payments—							
Interest	291.0	327.8	141.4	120.0	91.2	59.3	1,030.7
Transfers to persons	69.9	54.9	34.4	14.5	18.3	5.7	197.7
Subsidies	18.9	7.5	4.0	0.8	2.7	3.6	37.6
Transfers overseas	..	0.3	..	..	..	..	0.3
Grants for private capital purposes	29.4	15.9	14.3	6.7	3.2	2.4	72.0
Grants to local authorities	83.7	73.6	66.2	9.8	25.0	2.3	260.6
Total transfer payments	*492.9*	*479.9*	*260.3*	*151.9*	*140.4*	*73.4*	*1,598.8*
Net advances—							
To the private sector	5.8	65.2	35.8	6.6	26.7	10.8	150.9
To public financial enterprises	52.0	5.0	..	25.9	..	..	82.9
To local authorities	5.6	0.3	11.7	−0.5	0.1	0.1	17.3
Total net advances	*63.5*	*70.6*	*47.5*	*31.9*	*26.8*	*10.9*	*251.1*
Total outlay	**3,605.5**	**2,875.9**	**1,572.8**	**1,082.5**	**1,068.1**	**442.0**	**10,646.8**
of which—							
current outlay	2,358.9	1,827.0	1,005.8	670.1	675.0	301.3	6,838.1
capital outlay	1,246.7	1,048.9	567.1	412.3	393.1	140.7	3,808.6
RECEIPTS AND FINANCING ITEMS							
Receipts—							
Taxes, fees, fines, etc.	1,124.8	843.9	310.2	235.5	203.7	63.7	2,781.8
Income from public enterprises	44.6	83.4	18.3	21.2	25.9	11.4	204.8
Interest, etc., received	113.7	89.4	83.7	36.7	69.6	14.8	407.9
Grants from the Australian Government—							
for current purposes	1,178.3	915.0	614.1	441.2	403.2	183.3	3,735.0
for capital purposes	455.2	348.5	242.6	150.9	143.8	68.6	1,409.7
Total receipts	*2,916.6*	*2,280.2*	*1,268.9*	*885.4*	*846.1*	*342.0*	*8,539.3*
Financing items—							
Net borrowing—							
Public corporation securities	138.9	181.0	12.2	22.2	28.4	13.5	396.3
Other general government securities	16.6	0.7	44.7	4.0	3.2	0.6	69.8
Advances from the Australian Government(net)—							
For loan works purposes	176.9	148.4	88.4	79.8	52.7	46.0	592.1
Other	205.4	158.3	91.5	87.3	60.6	29.7	632.8
Net receipts of private trust funds	2.2	110.0	20.4	2.7	11.0	6.3	152.5
Reduction in cash and bank balances	28.1	−93.4	42.7	−20.2	26.4	4.6	−11.9
Reduction in security holdings	−25.5	−23.9	−30.3	2.4	4.2	−1.8	−75.0
Other funds available (including errors and omissions)—							
Depreciation allowances	105.0	80.6	28.6	21.1	27.4	8.7	271.3
Other	41.4	−34.0	5.8	−2.2	8.1	−7.6	79.6
Total financing items	*688.9*	*595.7*	*303.9*	*197.1*	*222.0*	*100.0*	*2,107.5*
Total funds available	**3,605.5**	**2,875.9**	**1,572.8**	**1,082.5**	**1,068.1**	**442.0**	**10,646.8**

(a) Excludes financial enterprises.

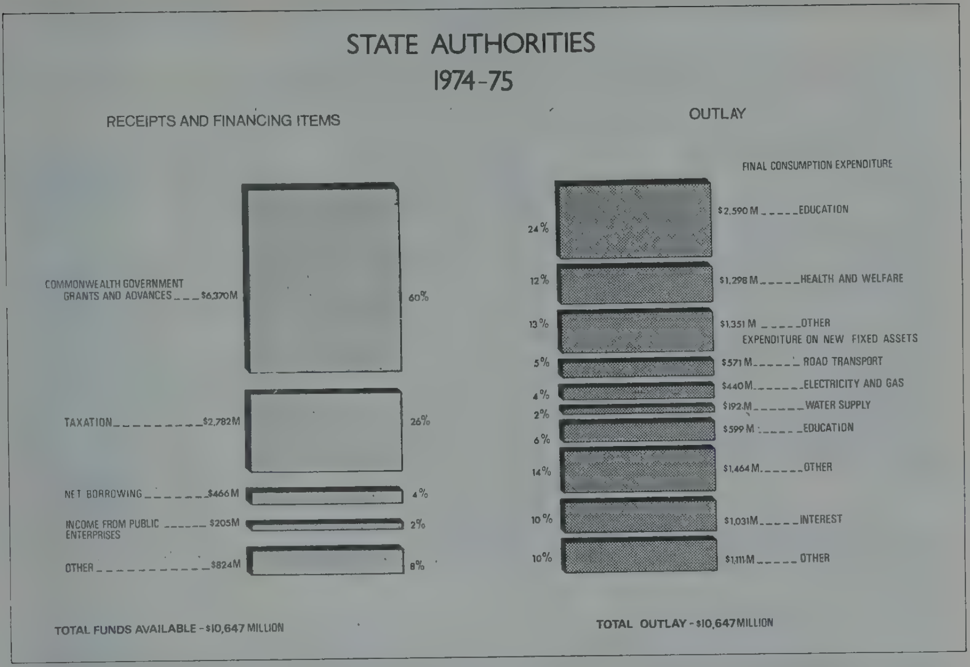


PLATE 43

Main components of outlay

The main component of the outlay of State authorities is expenditure on goods and services. As in the case of authorities of the Commonwealth Government, this expenditure consists mainly of final consumption expenditure, and expenditure on new fixed assets. The following tables show final consumption expenditure and expenditure on new fixed assets classified by purpose for State Authorities.

STATE AUTHORITIES: FINAL CONSUMPTION EXPENDITURE CLASSIFIED BY PURPOSE
($ million)

Purpose	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
Law, order and public safety	235.9	276.3	321.6	395.8	546.5
General administration, n.e.c.	165.9	180.9	208.4	233.1	335.4
Education	961.0	1,147.2	1,367.2	1,778.8	2,590.1
Health	432.9	499.3	580.5	790.5	1,198.2
Social Security and Welfare	41.1	48.9	59.1	68.4	100.1
Housing and community amenities—					
Housing	1.1	1.6	1.7	2.1	2.9
Community and regional development	4.7	6.0	7.2	9.9	16.0
Protection of the environment, and community amenities	0.5	1.4	4.0	6.8	14.0
Recreation and culture	23.9	27.1	34.6	42.3	59.4
Economic services—					
Agriculture, forestry, fishing	105.4	125.2	154.0	180.7	222.5
Mining, manufacturing and construction	10.7	19.6	24.2	26.9	34.5
Electricity, gas and water supply	−0.2	0.3	1.8	1.1	4.7
Rail transport(*a*)	0.7	1.7	2.4	0.3	1.3
Sea transport	0.9	2.1	3.4	5.8	6.0
Road transport(*b*)	10.7	13.3	16.4	19.9	18.5
Other transport services, n.e.c.	1.3	1.4	1.7	2.2	2.6
Other economic services(*c*)	33.9	40.3	45.7	59.5	84.8
Other purposes	1.3	1.0	0.9	1.1	1.7
Total	2,031.7	2,393.5	2,834.5	3,625.2	5,239.3

(*a*) Includes suburban rail transport systems. (*b*) Includes road systems and ancillary facilities. (*c*) Includes general administration, regulation and research.

STATE AUTHORITIES: FINAL CONSUMPTION EXPENDITURE CLASSIFIED BY PURPOSE 1974-75

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
General public services—							
Law, order and public saftey	202.4	123.2	93.8	49.1	55.3	22.7	546.5
General administration, n.e.c.	151.3	56.7	46.6	26.8	31.0	23.0	335.4
Education	900.5	765.2	323.6	270.6	234.0	96.2	2,590.1
Health	454.6	271.4	164.1	116.4	143.3	48.4	1,198.2
Social security and welfare	29.8	23.6	22.4	10.8	11.3	2.3	100.1
Housing and community amenities—							
Housing	1.1	0.6	0.1	0.4	0.3	0.4	2.9
Community and regional development	6.5	5.7	..	2.5	1.1	0.2	16.0
Protection of the environment, and community amenities	2.4	6.2	1.1	1.3	0.6	2.4	14.0
Recreation and culture	17.1	13.6	6.9	9.4	6.8	5.6	59.4
Economic services—							
Agriculture, forestry, fishing	70.6	44.5	59.8	12.6	21.3	13.8	222.5
Mining, manufacturing and construction	10.1	3.4	6.0	4.5	8.8	1.8	34.5
Electricity, gas and water supply	1.1	−0.6	1.1	..	2.7	0.5	4.7
Rail transport(*a*)	..	0.5	..	..	0.8	..	1.3
Sea transport	3.7	..	1.7	0.5	..	..	6.0
Road transport(*b*)	1.7	5.6	3.7	1.3	1.1	5.1	18.5
Other transport services, n.e.c.	1.4	0.1	0.3	0.2	0.5	0.1	2.6
Other economic services(*c*)	11.5	26.9	14.4	11.1	15.6	5.2	84.8
Other purposes	0.4	0.3	..	0.7	0.2	0.1	1.7
Total	1,866.0	1,347.1	745.5	518.2	534.6	227.9	5,239.3

(*a*) Includes suburban rail transport systems. (*b*) Includes road systems and ancillary facilities. (*c*) Includes general administration, regulation and research.

STATE AUTHORITIES: EXPENDITURE ON NEW FIXED ASSETS CLASSIFIED BY PURPOSE

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
Law, order and public safety	23.8	27.2	34.7	39.1	46.0
General administration, n.e.c.	20.3	15.8	19.5	29.3	44.2
Education	223.7	260.5	293.2	345.4	598.6
Health	85.2	93.0	97.0	123.1	201.8
Social security and welfare	5.2	9.3	8.5	9.7	10.5
Housing and community amenities—					
Housing	96.5	78.4	77.0	120.0	281.8
Community and regional development	2.5	1.9	1.1	1.8	8.0
Protection of the environment, and community amenities	141.1	173.2	208.3	241.7	297.2
Recreation and culture	16.4	25.2	30.1	20.8	19.1
Economic services—					
Agriculture, forestry, fishing	97.7	104.0	102.6	109.8	149.3
Mining, manufacturing and construction	21.5	27.8	28.8	40.9	50.5
Electricity and gas	308.6	313.6	317.2	338.9	439.7
Water supply	93.0	115.3	136.6	147.8	191.7
Rail transport(*a*)	122.7	137.5	138.8	137.8	214.0
Sea transport	53.1	73.0	61.3	63.1	77.9
Road transport(*b*)	353.4	392.8	416.9	458.2	570.7
Other transport services, n.e.c.	13.0	11.4	8.2	6.8	21.5
Other economic services(*c*)	51.9	42.4	47.7	48.7	97.0
Other purposes	0.8	0.9	0.7	2.8	9.0
Total	1,730.4	1,903.6	2,028.2	2,285.8	3,328.8
of which—					
Public financial enterprises	33.8	26.0	24.6	27.5	62.9

(*a*) Includes suburban rail transport systems. (*b*) Includes road systems and ancillary facilities. (*c*) Includes general administration, regulation and research.

STATE AUTHORITIES: EXPENDITURE ON NEW FIXED ASSETS CLASSIFIED BY PURPOSE 1974-75

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
General public services—							
Law, order and public safety	13.7	8.4	9.1	4.0	5.5	5.2	46.0
General administration n.e.c.	13.2	1.1	11.6	11.1	4.4	2.8	44.2
Education	202.4	168.2	85.7	71.0	52.4	19.1	598.6
Health	62.4	46.7	24.5	32.4	31.0	4.9	201.8
Social security and welfare	2.0	1.9	2.2	1.2	2.7	0.6	10.5
Housing and community amenities—							
Housing	115.9	56.6	45.1	30.5	18.0	15.6	281.8
Community and regional development	2.2	1.7	..	1.7	2.3	..	8.0
Protection of the environment, and community amenities	134.5	108.8	0.3	18.7	34.9	..	297.2
Recreation and culture	6.0	4.7	0.2	5.2	1.7	1.2	19.1
Economic services—							
Agriculture, forestry, fishing	46.6	39.6	32.9	12.0	12.1	6.1	149.3
Mining, manufacturing and construction	11.1	7.1	13.7	17.2	1.2	0.1	50.5
Electricity and gas	79.0	127.3	116.5	31.1	50.5	35.3	439.7
Water supply	74.2	63.1	—0.3	26.2	27.2	1.2	191.7
Rail transport(*a*)	78.7	56.8	48.2	10.0	16.2	4.1	214.0
Sea transport	22.7	21.4	6.9	6.7	13.3	7.0	77.9
Road transport(*b*)	190.6	135.3	113.1	49.6	61.4	20.6	570.7
Other transport services n.e.c.	4.0	7.5	3.1	2.6	3.2	1.1	21.5
Other economic services(*c*)	22.9	19.3	38.6	4.1	8.7	3.4	97.0
Other purposes	9.0	..	..	..	..	..	9.0
Total	**1,091.4**	**875.5**	**551.6**	**335.4**	**346.5**	**128.3**	**3,328.8**
of which—							
Public financial enterprises	4.7	11.3	35.0	3.7	6.4	1.8	62.9

(*a*) Includes suburban rail transport systems. (*b*) Includes road systems and ancillary facilities. (*c*) Includes general administration, regulation and research.

Main components of receipts

The major source of funds available to State authorities is in the form of financial assistance by way of grants and advances from the Commonwealth Government. Taxation is also an important source of revenue, and central government borrowing by way of Commonwealth Government securities issued on behalf of the States as well as borrowing by statutory bodies accounted for a significant proportion of the total funds available, in marked contrast to the relatively minor role played by borrowing in financing the activities of the Commonwealth Government authorities.

Details of Commonwealth Government financial assistance to the States have already been given in the section dealing with Commonwealth Government authorities, and government borrowing activities are dealt with later in this chapter.

The following tables provide details of the taxes collected by State authorities classified by type of tax. Further information relating to State taxes may be found in *Public Authority Finance; Taxation, 1974–75*.

STATE AUTHORITIES: TAXATION BY TYPE OF TAX
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Estate, gift, probate and succession duties	149.4	144.6	163.3	185.6	198.1
Property taxes—					
Land tax	91.5	102.8	112.9	122.1	168.6
Metropolitan improvement rates	8.9	9.4	9.6	12.2	12.8
Other	0.8	0.7	1.1	1.6	1.7
Total property	*101.2*	*112.9*	*123.6*	*135.9*	*183.1*
Liquor taxes	44.6	47.9	51.9	57.3	75.4
Taxes on gambling—					
Lotteries	33.3	35.4	38.0	48.8	69.7
Poker machines	34.8	38.3	42.6	50.8	71.9
Racing	63.4	75.9	91.4	107.5	138.6
Casino tax	. .	. .	0.5	1.6	1.8
Total gambling	*131.5*	*149.6*	*172.5*	*208.7*	*282.0*
Taxes on ownership and operation of motor vehicles—					
Vehicle registration fees and taxes	159.7	190.4	223.6	240.2	284.1
Drivers', etc., licences and fees	19.4	25.1	27.8	29.2	43.1
Stamp duty on vehicle registration	20.3	24.3	30.9	39.7	51.5
Road transport taxes	16.4	17.1	17.6	17.2	15.1
Road maintenance contributions	37.4	38.8	40.0	43.0	44.1
Motor car third party insurance surcharge and duties	5.1	5.9	6.9	7.4	9.8
Total motor vehicles	*258.3*	*301.6*	*346.8*	*376.7*	*447.9*
Pay-roll tax	. .	304.7	449.1	667.0	994.4
Fire brigades contributions from insurance companies, etc.	28.1	33.5	38.6	46.3	65.9
Stamp duties, n.e.i.	240.3	249.6	351.1	430.9	390.1
Fees from regulatory services n.e.i.	7.6	9.3	11.7	14.3	18.8
Other taxes, fees, fines, etc.	45.0	57.4	67.0	78.4	126.1
Total taxation	**1,006.2**	**1,411.1**	**1,775.5**	**2,201.2**	**2,781.8**

STATE AUTHORITIES: PROPORTION OF EACH TYPE OF TAX TO TOTAL TAXATION
(per cent)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Estate, gift, probate and succession duties	14.8	10.2	9.2	8.4	7.1
Property taxes	10.2	8.0	7.0	6.2	6.5
Liquor taxes	4.4	3.4	2.9	2.6	2.7
Taxes on gambling	13.1	10.6	9.7	9.5	10.1
Taxes on ownership and operation of motor vehicles	25.6	21.4	19.5	17.1	16.1
Pay-roll tax	. .	21.6	25.3	30.3	35.7
Fire brigades contributions from insurance companies, etc.	2.8	2.4	2.2	2.1	2.4
Stamp duties n.e.i.	23.9	17.7	19.8	19.6	14.2
Fees from regulatory services n.e.i.	0.7	0.7	0.7	0.7	0.7
Other taxes, fees, fines, etc.	4.5	4.0	3.7	3.5	4.5
Total taxation	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

STATE AUTHORITIES: TAXATION BY TYPE OF TAX, 1974-75

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Estate, gift, probate and succession duties	82.0	60.7	24.4	16.8	10.0	4.1	198.1
Property taxes—							
Land tax	81.2	52.9	7.7	12.7	10.5	3.7	168.6
Metropolitan improvement rates	..	11.3	..	..	1.5	..	12.8
Other	0.5	..	..	1.2	..	..	1.7
Total property	*81.7*	*64.1*	*7.7*	*13.8*	*12.0*	*3.7*	*183.1*
Liquor taxes	28.9	21.9	10.4	5.4	6.9	1.9	75.4
Taxes on gambling—							
Lotteries	25.6	28.8	7.4	4.0	3.9	..	69.7
Poker machines	71.9	..	..	..	..	..	71.9
Racing	51.4	48.1	18.9	8.3	9.5	2.2	138.6
Casino	..	..	..	..	..	1.8	1.8
Total gambling	*149.0*	*76.9*	*26.3*	*12.3*	*13.4*	*4.1*	*282.0*
Taxes on ownership and operation of motor vehicles—							
Vehicle registration fees and taxes	115.2	75.0	33.3	26.3	26.7	7.6	284.1
Drivers' etc., licences and fees	21.4	12.7	2.1	3.1	2.8	1.0	43.1
Stamp duty on vehicle registration	8.4	23.6	6.0	8.6	3.2	1.7	51.5
Road transport taxes	0.9	5.3	6.9	0.1	1.5	0.4	15.1
Road maintenance contributions	20.8	10.0	5.1	4.1	4.2	..	44.1
Motor car third party insurance surcharge and duties	..	5.2	..	1.4	2.8	0.4	9.8
Total motor vehicles	*166.7*	*131.7*	*53.4*	*43.6*	*41.1*	*11.2*	*447.9*
Pay-roll tax	404.9	287.7	118.2	82.6	75.1	26.0	994.4
Fire brigades contributions from insurance companies, etc.	18.0	20.2	13.5	4.5	7.6	2.1	65.9
Stamp duties n.e.i.	135.9	141.7	41.1	37.1	26.7	7.5	390.1
Fees from regulatory services n.e.i.	4.8	7.6	2.2	2.3	1.4	0.5	18.8
Other taxes, fees, fines, etc.	53.0	32.2	13.4	17.2	8.3	2.2	126.1
Total taxation	1,125.1	844.9	310.5	235.5	202.5	63.2	2,781.8

LOCAL AUTHORITIES

In each State of Australia there exists a system of local government whose powers and responsibilities are in general similar, and cover such matters as the construction and maintenance of roads, streets and bridges, water, sewerage and drainage systems, health and sanitary services, the supervision of building, and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers. While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc., vary considerably from State to State, and even within States.

The areas over which local government bodies, numbering almost 900, exercise general control, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, towns and shires; and in Tasmania as cities and municipalities. In New South Wales some local authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g. the county councils. Within shires there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Australian Territories (except for the City of Darwin and Alice Springs), practically the whole of Australia comes within local government jurisdiction. For further details *see* State Year Books.

Area, population, dwellings, and value of rateable property

The area, population, dwellings, and the value of rateable property in the incorporated areas of each State are shown in the following table. The valuations relate to rateable property only and exclude government and other non-rateable property, whose value in the aggregate is considerable. In some cases councils rate on annual value, or unimproved capital value, or improved capital value, or partly on each of these bases of valuation. The amounts stated are the totals for the areas rated according to each basis of valuation. Particulars of dwellings are in accordance with the definition used in the 1971 census, and are compiled from information collected on the census schedules. For the purpose of the census a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include vacant dwellings available for sale and renting, 'week-end' and holiday dwellings, and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

In the following table particulars of number, area, and value of rateable property refer to estimates made, where practicable, for the capital city statistical division and outside this division. Wherever the statistical boundary cuts across a local government area the estimates have involved either the inclusion or exclusion of the whole of the local government authority concerned in, or from, the capital city statistical division. Particulars of population refer to estimates made for capital city statistical division and outside this division in accordance with the definition of boundaries used in the 1971 Census and exclude migratory population and population in unincorporated areas.

LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES

					Value of rateable property		
Location	*Number*	*Area*	*Population*	*Dwellings*	*Unimproved capital value*	*Improved capital value*	*Annual value*
		'000 hectares	*'000*	*No.*	*$'000*	*$'000*	*$'000*
New South Wales(*a*)—							
Sydney Statistical Division .	40	394	(*c*)2,877	(*d*)966,774	17,760,436	n.a.	n.a.
Other(*b*)	174	70,172	(*c*)1,866	(*d*)642,314	5,888,237	n.a.	n.a.
Total New South Wales .	*214*	*70,565*	*(c)4,743*	*(d)1,609,088*	*23,648,673*	*n.a.*	*n.a.*
Victoria(*e*)—							
Melbourne Statistical Division.	56	782	2,640	844,692	n.a.	15,159,707	855,581
Other(*f*)	155	21,925	987	322,582	n.a.	6,167,746	315,300
Total Victoria . . .	*211*	*22,707*	*3,627*	*1,167,274*	*n.a.*	*21,327,453*	*1,170,882*
Queensland(*g*)—							
Brisbane Statistical Division .	9	1,000	982	307,604	1,143,301	n.a.	n.a.
Other	122	171,600	983	306,985	1,257,634	n.a.	n.a.
Total Queensland . .	*131*	*172,600*	*1,965*	*614,589*	*2,400,935*	*n.a.*	*n.a.*
South Australia(*h*)—							
Adelaide Statistical Division .	31	184	885	290,815	n.a.	n.a.	n.a.
Other	106	14,947	316	112,752	n.a.	n.a.	n.a.
Total South Australia .	*137*	*15,131*	*1,201*	*403,567*	*400,114*	*n.a.*	*221,318*
Western Australia(*i*)—							
Perth Statistical Division .	26	537	763	246,707	1,209,782	n.a.	64,360
Other	112	252,226	332	99,543	376,458	n.a.	14,988
Total Western Australia .	*138*	*(j)252,550*	*1,095*	*346,250*	*1,586,240*	*n.a.*	*79,349*
Tasmania—							
Hobart Statistical Division .	5	94	164	51,723	329,610	1,093,499	74,059
Other	44	6,739	242	80,197	289,579	1,223,526	73,354
Total Tasmania . .	*49*	*6,833*	*(k)406*	*(k)131,920*	*(l)619,189*	*(l)2,317,025*	*(l)147,413*

(*a*) Based on year ended 31 December 1972. (*b*) Excludes Lord Howe Island, unincorporated areas and migratory population. (*c*) As at 30 June 1973. (*d*) As at 30 June 1973; Estimated on basis of Census 30 June 1971. (*e*) Based on year ended 30 September 1974. (*f*) Excludes Yallourn Works Area, under the jurisdiction of the State Electricity Commission, and other unincorporated areas. (*g*) Year ended 30 June 1974. Total population less migratory and unincorporated. (*h*) Year ended 30 June 1974. (*i*) Year ended 30 June 1973. Excludes unincorporated areas. (*j*) Area as determined in 1973 by the Division of National Mapping, Department of Minerals and Energy. (*k*) As at 30 June 1975. (*l*) As at 1 July 1974.

Receipts, financing items and outlay

The following tables show details of the receipts, financing items and outlay of all local authorities for the years 1970–71 to 1974–75, and of local authorities in each of the six States in 1974–75. Figures shown for 1974–75 are based on limited data, but may be taken as rough indicators of orders of magnitude.

LOCAL AUTHORITIES: RECEIPTS AND OUTLAY
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
OUTLAY					
Final consumption expenditure—					
General public services	80.3	90.7	97.8	120.8	160.5
Education	1.2	1.6	2.0	2.9	3.9
Health	15.0	18.3	21.8	25.5	32.0
Social security and welfare	3.6	4.0	4.8	7.2	9.3
Housing and community amenities—					
Community and regional development	2.5	3.1	3.7	6.4	10.5
Protection of the environment	16.3	16.3	21.1	28.1	37.1
Other	2.5	2.8	3.6	4.7	5.8
Recreation and culture	49.7	58.8	71.9	78.1	101.0
Economic services	17.4	18.9	20.6	26.0	35.6
Other purposes	0.2	0.2	0.4	0.4	1.0
Total	*188.9*	*214.8*	*248.2*	*300.4*	*397.0*
Gross capital formation—					
Expenditure on new fixed assets—					
General public services	43.7	43.5	47.1	52.7	79.5
Education	0.3	0.4	0.3	0.7	0.8
Health	0.6	0.7	0.5	0.9	1.0
Social security and welfare	0.8	1.0	0.8	2.6	3.2
Housing and community amenities—					
Community and regional development	0.1	0.2	1.1	2.6	2.1
Protection of the environment	45.9	53.0	62.9	65.1	92.2
Other	0.8	0.9	1.3	2.4	3.8
Recreation and culture	24.5	26.1	32.2	36.2	49.3
Economic services—					
Mining manufacturing and construction	1.4	2.2	2.5	2.3	4.7
Electricity and gas	77.2	71.9	79.2	75.7	91.7
Water supply	29.4	32.4	40.3	40.3	43.9
Road transport(*a*)	251.6	279.9	318.3	358.5	457.4
Other transport services n.e.c.	0.9	2.3	1.7	1.8	1.6
Other economic services	3.5	3.6	1.9	1.8	2.5
Other purposes	..	..	..	..	..
Total	*480.6*	*518.1*	*590.1*	*643.6*	*833.9*
Expenditure on existing assets and stocks	−3.7	8.6	2.4	9.2	39.1
Interest paid	93.8	104.9	116.8	128.2	142.0
Net advances to the private sector	1.7	2.8	2.0	3.4	5.6
Total outlay	**761.2**	**849.3**	**959.4**	**1,084.7**	**1,417.6**
of which—					
Current outlay	282.7	319.7	365.0	428.6	539.0
Capital outlay	478.6	529.5	594.5	656.1	878.6
RECEIPTS AND FINANCING ITEMS					
Receipts—					
Taxes, fees, fines, etc.—					
Rates on land	398.3	440.2	480.4	552.1	674.1
Licences, etc.	11.3	12.7	16.2	21.0	23.3
Total	*409.6*	*452.9*	*496.6*	*573.1*	*697.4*
Income from public enterprises	76.5	79.1	103.1	100.8	98.9
Property income	11.4	13.8	15.7	24.9	43.4
Grants from State and Federal authorities	96.8	120.6	170.3	156.4	314.5
Total receipts	*594.3*	*666.4*	*785.8*	*855.2*	*1,154.2*
Financing items—					
Net borrowing—local authority securities	106.0	139.8	156.7	144.8	199.7
Advances from State and Federal authorities	1.8	2.0	3.5	5.9	17.3
Net receipts of private trust funds	1.0	1.1	12.3	5.9	6.0
Reduction in cash and bank balances	−0.5	−21.7	−56.2	−8.5	7.2
Reduction in security holdings	−18.4	−6.1	−17.0	−10.5	−2.4
Other funds available (including errors and omissions)—					
Depreciation allowances	28.1	30.0	32.5	34.6	41.4
Other	49.0	37.7	41.9	57.4	−6.0
Total financing items	*167.0*	*182.9*	*173.7*	*229.5*	*263.2*
Total funds available	**761.2**	**849.3**	**959.4**	**1,084.7**	**1,417.6**

(*a*) Includes road systems and ancillary facilities.

LOCAL AUTHORITIES: RECEIPTS AND OUTLAY, 1974-75

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
OUTLAY							
Final consumption expenditure—							
General public services	51.2	46.3	32.0	14.0	11.2	5.7	160.5
Education	..	3.9	..	..	..	..	3.9
Health	12.4	12.2	3.0	1.2	2.4	0.8	32.0
Social security and welfare	1.6	7.2	..	..	0.5	..	9.3
Housing and community amenities—							
Community and regional development	4.5	2.6	1.5	1.7	0.2	..	10.5
Protection of the environment	13.8	9.8	5.7	2.9	2.9	1.9	37.1
Other	2.6	1.3	1.6	0.5	0.4	−0.3	6.2
Recreation and culture	37.7	30.5	11.5	7.9	8.9	4.5	101.0
Economic services	11.3	21.7	−2.3	1.7	3.1	0.1	35.6
Other purposes	0.9	..	..	..	..	..	1.0
Total	*136.0*	*135.4*	*53.2*	*30.1*	*29.6*	*12.7*	*397.0*
Gross capital formation—							
Expenditure on new fixed assets—							
General public services	19.6	38.3	10.8	3.7	5.4	1.7	79.5
Education	0.2	0.4	..	..	0.2	..	0.8
Health	0.3	0.3	0.1	..	0.4	..	1.0
Social security and welfare	1.5	0.4	0.2	0.7	0.4	..	3.2
Housing and community amenities—							
Community and regional development	0.8	..	0.4	..	1.0	..	2.1
Protection of the environment	26.9	8.6	46.0	4.8	1.2	4.8	92.2
Other	3.4	..	0.4	..	..	..	3.8
Recreation and culture	16.3	9.6	7.1	3.6	10.7	2.0	49.3
Economic services—							
Mining, manufacturing and construction	4.5	0.2	..	..	..	..	4.7
Electricity and gas	78.2	3.2	8.5	0.5	1.2	..	91.7
Water supply	11.0	0.4	31.5	..	..	1.0	43.9
Road transport(a)	190.2	108.2	69.2	34.8	40.5	14.5	457.4
Other transport services n.e.c.	0.5	..	1.0	..	..	..	1.6
Other economic services	1.2	0.4	..	..	0.9	..	2.5
Other purposes	..	..	..	..	..	..	..
Total	*354.4*	*169.9*	*175.3*	*48.2*	*61.9*	*24.1*	*833.9*
Expenditure on existing assets and stocks	25.3	18.7	−1.6	0.3	−3.5	..	39.1
Interest paid	58.6	21.8	43.5	4.6	7.5	6.0	142.0
Net advances to the private sector	5.6	..	..	..	..	..	5.6
Total outlay	**579.9**	**345.9**	**270.4**	**83.2**	**95.5**	**42.8**	**1,417.6**
of which—							
Current outlay	194.6	157.2	96.7	34.7	37.1	18.7	539.0
Capital outlay	385.3	188.7	173.7	48.5	58.4	24.1	878.6
RECEIPTS AND FINANCING ITEMS							
Receipts—							
Taxes, fees, fines, etc.—							
Rates on land	260.1	211.9	80.0	51.0	49.6	21.5	p674.1
Licences, etc.	7.4	5.6	6.5	0.8	2.2	0.8	p23.3
Total	*267.5*	*217.5*	*86.5*	*51.8*	*51.8*	*22.3*	*p697.4*
Income from public enterprises	52.7	3.2	39.8	0.2	0.4	2.5	98.9
Property income	24.9	8.0	8.0	1.2	1.3	..	43.4
Grants from State and Federal authorities	108.3	79.9	76.6	14.2	31.0	4.5	314.5
Total receipts	*453.4*	*308.6*	*210.8*	*67.4*	*84.5*	*29.3*	*1,154.2*
Financing items—							
Net borrowing—local authority securities	70.8	29 4	68.1	11.0	12.1	8.2	199.7
Advances from State and Federal authorities	5.6	0.3	11.7	−0.5	0.1	0.1	17.3
Net receipts of private trust funds	..	..	6.0	..	..	..	6.0
Reduction in cash and bank balances	30.6	−0.9	−8.7	−15.5	2.3	−0.5	7.2
Reduction in security holdings	1.1	−3.5	..	..	..	0.1	−2.4
Other funds available (including errors and omissions)—							
Depreciation allowances	41.4	..	..	..	..	..	41.4
Other	−23.0	12.0	−17.5	20.9	−3.5	5.6	−6.0
Total financing items	*126.5*	*37.3*	*59.5*	*15.8*	*11.0*	*13.5*	*263.2*
Total funds available	**579.9**	**345.9**	**270.4**	**83.2**	**95.5**	**42.8**	**1,417.6**

ALL PUBLIC AUTHORITIES

In the following tables the transactions of the Commonwealth Government, State and Local authorities have been brought together and consolidated to provide details of the receipts and outlay of the public authority sector as a whole.

Summary of receipts and outlay

The receipts and outlay of all public authorities for the five year period ended 1974–75 are set out in the following table.

ALL PUBLIC AUTHORITIES(*a*): RECEIPTS AND OUTLAY
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
OUTLAY					
Final consumption expenditure	4,191.6	4,783.5	5,456.2	6,668.7	9,211.8
Gross capital formation—					
Increase in stocks	61.6	−13.8	−43.7	56.7	381.3
Expenditure on new fixed assets	2,871.2	3,233.9	3,402.0	3,902.3	5,454.0
Expenditure on existing assets (net)	48.0	112.5	66.4	203.7	374.1
Total gross capital formation	*2,980.8*	*3,332.7*	*3,424.7*	*4,162.7*	*6,209.3*
Transfer payments—					
Interest	831.8	909.0	1,008.4	1,069.2	1,281.1
Transfers to persons	1,857.8	2,173.4	2,697.7	3,321.1	4,607.0
Subsidies	285.6	405.4	350.1	329.8	321.6
Transfers overseas	184.7	205.6	251.9	288.3	349.0
Grants for private capital purposes	59.5	65.5	84.9	106.8	169.4
Total transfer payments	*3,219.4*	*3,758.9*	*4,393.0*	*5,115.2*	*6,728.1*
Net advances—					
To the private sector	58.3	83.9	30.9	116.1	281.4
To public financial enterprises	60.4	60.5	67.2	80.4	259.6
To overseas	65.2	−4.1	7.4	32.2	36.1
Total net advances	*183.9*	*140.3*	*105.5*	*228.7*	*577.1*
Total outlay	10,575.6	12,015.4	13,379.4	16,175.3	22,726.3
of which—					
Current outlay	7,411.0	8,542.4	9,849.2	11,783.9	15,939.9
Capital outlay	3,164.7	3,473.0	3,530.2	4,391.4	6,786.4
RECEIPTS AND FINANCING ITEMS					
Receipts—					
Taxes, fees, fines, etc.	8,598.3	9,802.6	10,742.5	13,691.6	17,691.7
Income from public enterprises	682.1	791.2	772.8	671.5	551.4
Interest, etc., received	277.4	297.7	339.0	418.4	538.6
Total receipts	*9,557.8*	*10,891.5*	*11,854.3*	*14,781.5*	*18,781.7*
Financing items—					
Net borrowing—					
Treasury notes	17.9	−9.7	164.6	−37.8	1,689.1
Commonwealth Government securities	260.1	616.7	665.5	801.2	554.1
Local authority and public corporation securities	344.9	479.8	485.3	506.6	618.0
Other general Government securities	57.1	55.1	41.6	61.7	69.8
Total net borrowing	*680.0*	*1,141.9*	*1,357.0*	*1,331.7*	*2,931.0*
Net receipts of private trust funds	133.1	168.8	221.0	17.8	242.3
Reduction in cash and bank balances	−210.8	−684.9	−544.4	−829.6	575.0
Reduction in security holdings	−163.5	−103.6	−181.7	−132.4	−595.5
Other funds available (including errors and omissions)—					
Depreciation allowances	447.8	489.2	532.8	582.2	591.7
Other	131.4	112.5	140.2	424.0	200.1
Total financing items	*1,017.8*	*1,123.9*	*1,525.1*	*1,393.8*	*3,944.6*
Total funds available	10,575.6	12,015.4	13,379.4	16,175.3	22,726.3

(*a*) Excluding financial enterprises.

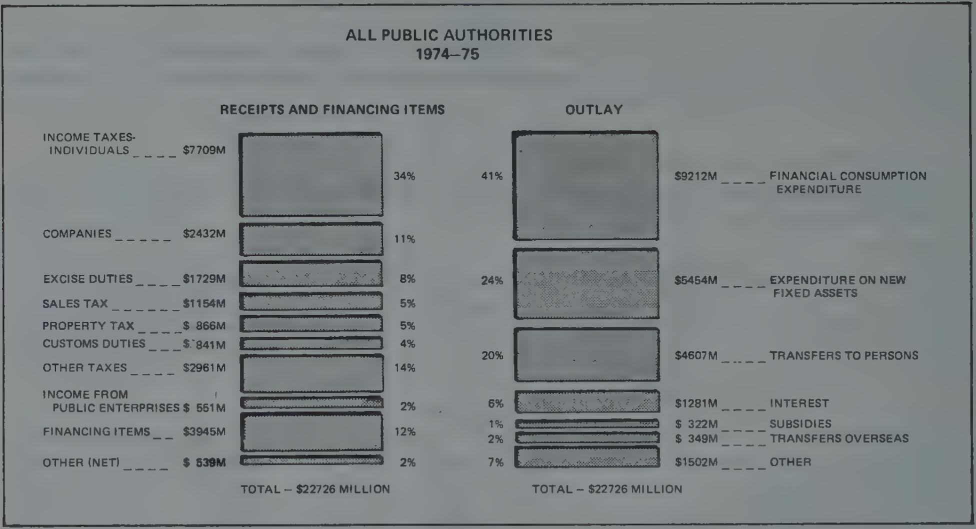


PLATE 44

Main components of outlay

The following tables show final consumption expenditure and expenditure on new fixed assets of all public authorities classified by purpose for the years 1970–71 to 1974–75.

ALL PUBLIC AUTHORITIES: FINAL CONSUMPTION EXPENDITURE CLASSIFIED BY PURPOSE

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General public services—					
General administration, n.e.c.	480.2	552.2	624.6	762.0	1,021.2
External affairs	40.1	45.4	50.4	58.9	84.8
Law, order and public safety	261.5	308.1	360.6	447.5	624.8
General research	59.8	68.4	76.9	94.2	116.7
Defence	1,062.8	1,128.0	1,179.3	1,223.1	1,445.0
Education	1,017.6	1,212.8	1,449.7	1,894.1	2,766.1
Health	563.7	655.3	759.6	1,022.7	1,534.0
Social security and welfare	95.1	113.9	141.2	180.0	280.5
Housing and community amenities—					
Housing	1.5	3.1	5.0	9.8	15.5
Community and regional development	14.8	16.4	21.9	36.7	59.6
Protection of the environment	18.4	19.3	27.2	38.3	54.6
Community amenities	2.3	2.9	3.9	5.1	8.1
Recreation and culture	150.2	173.4	205.8	255.5	341.4
Economic services—					
Agriculture, forestry, fishing	173.3	199.6	239.3	267.5	328.9
Mining, manufacturing and construction	21.3	30.9	36.5	43.6	56.8
Electricity, gas and water supply	−0.2	0.3	1.8	1.1	4.7
Transport and communication	73.0	89.0	104.5	126.2	147.1
Other economic services(*a*)	155.5	164.2	167.4	201.0	276.4
Other purposes	0.9	0.5	0.4	1.7	45.7
Total	**4,191.6**	**4,783.5**	**5,456.1**	**6,668.8**	**9,211.8**

(*a*) Includes general administration, regulation and research.

ALL PUBLIC AUTHORITIES: EXPENDITURE ON NEW FIXED ASSETS CLASSIFIED BY PURPOSE

($ million)

	1970–71	1971–72	1972–73	1973–74	1974–75
General public services—					
General administration	82.5	82.2	104.0	126.0	181.9
External affairs	2.3	3.5	15.4	12.3	15.9
Law, order and public safety	25.9	29.9	37.7	42.5	53.6
General research	13.1	10.1	9.4	15.1	20.6
Education	246.0	286.0	323.6	378.2	644.6
Health	101.9	115.2	116.9	146.1	243.2
Social security and welfare	12.2	12.9	11.7	23.0	22.8
Housing and community amenities—					
Housing	110.1	85.0	81.1	124.3	307.9
Community and regional development	19.0	24.5	28.0	38.8	60.2
Protection of the environment	189.3	230.1	277.7	317.5	409.7
Community amenities	0.8	0.4	0.5	0.5	0.9
Recreation and culture	53.1	66.3	75.9	77.7	99.2
Economic services—					
Agriculture, forestry and fishing	100.0	108.2	119.1	119.2	162.8
Mining, manufacturing and construction	24.7	32.0	33.6	45.5	62.0
Electricity and gas	422.3	409.4	419.6	439.0	553.7
Water supply	129.0	155.4	180.6	192.6	239.4
Rail transport(*a*)	136.0	154.7	149.3	145.3	227.5
Sea transport	60.9	89.8	85.5	75.1	134.1
Road transport(*b*)	626.4	691.2	759.1	842.7	1,056.9
Air transport	96.3	176.3	60.1	85.8	97.6
Pipelines	3.6	2.6	12.1	56.3	59.3
Other transport services, n.e.c.	12.5	13.6	9.6	10.5	23.8
Communications	374.4	426.7	460.3	559.1	717.9
Other economic services(*c*)	76.2	77.0	83.2	76.0	136.7
Other purposes	0.8	0.9	0.7	2.8	15.5
Total	2,919.5	3,283.7	3,454.9	3,951.8	5,547.9
of which—					
Public financial enterprises	48.2	49.7	52.9	49.3	93.9

(*a*) Includes suburban rail transport system. (*b*) Includes road systems and ancilliary facilities. (*c*) Includes general administration, regulation and research.

Main components of receipts

Taxes and net borrowing constitute the main sources of financing of the activities of the public authorities. Details of the debt of public authorities are given in the next section of this chapter. Taxation, by type of tax, for the years 1970–71 to 1974–75 was as follows.

ALL PUBLIC AUTHORITIES: TAXATION, BY TYPE OF TAX

($ million)

	1970–71	1971–72	1972–73	1973–74	1974–75
Income tax—					
Individuals	3,175	3,765	4,084	5,485	7,709
Companies(*a*)	1,427	1,520	1,617	2,013	2,432
Estate, gift, probate and succession duties	227	220	237	261	278
Customs duties	466	469	513	604	840
Excise duties	1,054	1,213	1,268	1,555	1,729
Sales tax	633	681	765	969	1,154
Primary production taxes	27	28	35	64	143
Payroll tax	248	396	455	675	1,010
Property taxes	502	559	611	695	866
Liquor taxes	45	49	53	58	77
Taxes on gambling	132	150	173	209	282
Taxes on ownership and operation of motor vehicles	260	304	349	380	452
Stamp duties, n.e.i.	243	252	355	435	394
Other taxes, fees, fines, etc.	160	198	227	287	326
Total	8,598	9,803	10,742	13,692	17,692

(*a*) Taxes paid by Commonwealth Government public enterprises have been offset. Includes dividend and interest (withholding) taxes.

Level of government

In the following tables details are given for 1974–75 of the receipts and outlay of all public authorities, broken down by level of government in order to show their relative contributions to various expenditure programs, and their roles in financing these programs through taxes and transfers.

ALL PUBLIC AUTHORITIES(*a*): RECEIPTS AND OUTLAY BY LEVEL OF GOVERNMENT, 1974-75

($ million)

	Federal authorities	*State authorities*	*Local authorities*	*All public authorities*
OUTLAY				
Expenditure on goods and services—				
General public services—				
General administration, n.e.c.	593.0	373.2	236.9	1,203.1
External affairs	100.7	..	..	100.7
Law, order and public safety	82.8	592.5	3.1	678.4
General research	130.8	6.4	..	137.2
Defence	1,444.2	..	..	1,444.2
Education	217.2	3,188.8	4.7	3,410.7
Health	344.2	1,400.0	33.0	1,777.2
Social security and welfare	180.2	110.6	12.5	303.3
Housing and community amenities—				
Housing	35.2	284.7	3.5	323.4
Community and regional development	83.2	24.0	12.6	119.8
Protection of the environment	26.1	309.1	129.3	464.5
Community amenities	0.3	2.1	6.5	9.0
Recreation and Culture	211.8	78.5	150.3	440.6
Economic services—				
Agriculture, forestry and fishing	114.7	371.8	5.0	491.5
Mining, manufacturing and construction	24.7	85.0	9.0	118.7
Electricity, gas and water supply	26.1	636.1	135.6	797.8
Transport and communication	1,067.3	913.4	483.2	2,463.9
Other economic services	227.6	180.9	4.6	413.1
Other purposes	50.3	10.0	1.0	61.3
Total	4,960.7	8,568.0	1,231.0	14,759.5
less expenditure by public financial enterprises	−31.0	−62.9	..	−93.9
Total expenditure on goods and services	**4,929.7**	**8,505.1**	**1,231.0**	**14,665.6**
of which—				
Final consumption expenditure	3,575.5	5,239.3	397.0	9,211.8
Expenditure on new fixed assets	1,354.2	3,265.9	833.9	5,454.0
Increase in stocks	313.5	55.1	12.7	381.3
Expenditure on existing assets (net)	111.1	236.6	26.4	374.1
Transfer payments—				
Interest	108.4	1,030.7	142.0	1,281.1
Transfers to persons	4,409.3	197.7	..	4,607.0
Subsidies	284.0	37.6	..	321.6
Transfers overseas	348.7	0.3	..	349.0
Grants for private capital purposes	97.4	72.0	..	169.4
Grants to the States—for current purposes	3,735.0	..	..	(*b*)
—for capital purposes	1,409.7	..	..	(*b*)
Grants to local authorities	53.9	260.6	..	(*b*)
Total transfer payments	10,446.4	1,598.8	142.0	6,728.1
Net advances to—				
The private sector	124.9	150.9	5.6	281.4
Public financial enterprises	176.7	82.9	..	259.6
The States	1,224.9	..	..	(*b*)
Local authorities	..	17.3	..	(*b*)
Overseas	36.1	..	..	36.1
Total net advances	1,562.6	251.1	5.6	577.1
Total outlay	**17,363.3**	**10,646.8**	**1,417.6**	**22,726.3**
of which—				
Current outlay	12,608.2	6,838.1	539.0	15,939.9
Capital outlay	4,755.1	3,808.6	878.6	6,786.4

(a) Excluding financial enterprises. (*b*) In consolidated figures for all public authorities inter-authority grants and advances are not shown.

ALL PUBLIC AUTHORITIES(*a*): RECEIPTS AND OUTLAY BY LEVEL OF GOVERNMENT, 1974–75—*continued*

($ million)

	Federal Authorities	*State authorities*	*Local authorities*	*All public authorities*
RECEIPTS AND FINANCING ITEMS				
Receipts—				
Taxes, fees, fines, etc.—				
Income tax—				
Individuals	7,708.6	..	..	7,708.6
Companies(*b*)	2,432.1	..	..	2,432.1
Estate, gift, probate and succession duties	80.0	198.1	..	278.0
Customs duties	840.5	..	..	840.5
Excise duties	1,728.6	..	..	1,728.6
Sales tax	1,154.3	..	..	1,154.3
Payroll tax	15.5	994.4	..	1,009.9
Primary production taxes and charges	143.4	..	..	143.4
Property taxes	8.8	183.1	674.1	865.9
Liquor taxes	1.3	75.4	..	76.7
Taxes on gambling	..	282.0	..	282.0
Taxes on ownership and operation of motor vehicles	4.2	447.9	..	452.1
Stamp duties, n.e.i.	3.7	390.1	..	393.8
Broadcasting listeners' and television viewers' licences	18.8	..	..	18.8
Fees from regulatory services	8.2	18.8	14.2	41.2
Other taxes, fees, fines, etc.	64.5	192.0	9.1	265.6
Total taxes, etc.	14,212.5	2,781.8	697.4	17,691.7
Income from public enterprises	247.7	204.8	98.9	551.4
Interest, etc., received	87.4	407.9	43.4	538.6
Grants from the Commonwealth Government				
For current purposes	..	3,735.0	..	(*c*)
For capital purposes	..	1,409.7	..	(*c*)
Direct grants from Commonwealth Government to local authorities	..	..	53.9	(*c*)
Grants from State Authorities	..	..	260.6	(*c*)
Total Receipts	**14,547.6**	**8,539.3**	**1,154.2**	**18,781.7**
Financing items—				
Net borrowing—				
Treasury bills and notes	1,689.1	..	..	1,689.1
Commonweath government securities	554.1	..	..	554.1
Local authorities and public corporation securities	22.1	396.3	199.7	618.0
Other general government securities	..	69.8	..	69.8
Total net borrowing	2,265.3	466.1	199.7	2,931.0
Advances from the Commonwealth Government—				
For loan works purposes	..	592.1	..	(*c*)
Other	..	632.8	..	(*c*)
Advances from State authorities	..	..	17.3	(*c*)
Net receipts of private trust funds	83.8	152.5	6.0	242.3
Reduction in cash and bank balances	579.6	−11.9	7.2	575.0
Reduction in security holdings	−518.2	−75.0	−2.4	−595.5
Other funds available (including errors and omissions)—				
Depreciation allowances	279.0	271.3	41.4	591.7
Other	126.2	79.6	−6.0	200.1
Total financing items	**2,815.7**	**2,107.5**	**263.2**	**3,944.6**
Total funds available	**17,363.3**	**10,646.8**	**1,417.6**	**22,726.3**

(*a*) Excluding financial enterprises. (*b*) Taxes paid by Commonwealth Government public enterprises have been offset. Includes dividend and interest (withholding) taxes. (*c*) In consolidated figures for all public authorities inter-authority grants and advances are not shown.

PUBLIC SECTOR BORROWING

Figures given in this section do not purport to show either 'public debt' or 'net public debt', but are designed to provide details of securities issued on behalf of the Commonwealth Government and the States, together with details of securities issued and other forms of debt outstanding in respect of local authorities and State authorities with independent borrowing powers.

This information cannot be aggregated, without adjustment, to provide a measure of the 'debt' of public authorities for a number of reasons. There are forms of debt not evidenced by the issue of securities, such as Commonwealth Government advances to the States for specific capital purposes—of which the advances made under the Commonwealth-State Housing Agreements would be the most important example. Governments themselves maintain significant holdings of their own securities: for example, the Commonwealth Government, in the National Debt Sinking Fund, the Loan Consolidation and Investment Reserve, and in other Trust Funds, holds large investments in securities issued either directly by itself or on behalf of the States. Some of the securities issued on behalf of the States and held by the Commonwealth Government represent the proceeds of overseas loans, securities for which were issued directly by the Commonwealth Government—the Australian currency counterpart proceeds of the loans being invested in special loans to finance State works programs. A number of State public corporations and local authorities also maintain significant investments in government securities (including their own securities). Aggregation of the figures for securities on issue which follow would clearly involve a substantial degree of duplication; the sum of securities on issue therefore cannot be regarded as representing 'net public debt'.

Commonwealth Government and States: Loan transactions and Government securities on issue

Under the 1927 Financial Agreement between the Commonwealth Government and the States, the Commonwealth Government accepted responsibility for the securities of State governments then on issue, and was empowered to arrange for all future borrowings on behalf of the Commonwealth Government and the States and to issue Commonwealth Government securities for all money borrowed. The Commonwealth Government is reimbursed by the States for interest, exchange, etc., paid on their behalf, and the securities are redeemed from the National Debt Sinking Fund to which both the Commonwealth Government and State governments make contributions.

In the tables which follow, details are given of transactions in Commonwealth Government securities issued on account of the Commonwealth Government and the States, together with details of securities on issue, annual interest liability and average rate of interest liability. Amounts relating to overseas loans are shown in the currencies in which the loans are repayable, and in Australian currency equivalent calculated on the basis of the rates of exchange ruling at 30 June in each year shown. All amounts shown are at face value.

For further information relating to securities issued by the Commonwealth Government and the States reference should be made to the Commonwealth Government Budget paper *Government Securities on Issue.*

Net movement in securities on issue

Summary details of the net movement in securities issued for Commonwealth Government purposes and on account of the States during the period 1970–71 to 1974–75, are given in the following group of tables. Also provided is a table (page 620) which sets out the balance of securities on issue at 30 June 1974 and 1975, and the composition of the change in these balances.

NET MOVEMENT IN GOVERNMENT SECURITIES ON ISSUE
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
NEW SECURITIES ISSUED					
Securities repayable in Australian currency—					
Inscribed stock and bonds	808.3	814.8	870.4	1,416.4	1,054.9
Special bonds	233.1	139.2	109.2	454.2	343.0
Drought bonds	0.4	0.2	0.8	3.2	1.5
Advance loan subscriptions	8.2	0.4	(*c*)11.6	(*c*)−8.0	(*c*)−14.3
Overdue securities	..	..	..	..	..
Tax-free stock	..	..	..	..	..
Debentures	..	..	..	..	..
Stock issued to Government Savings banks under special agreements(*a*)	15.0	24.5	68.4	48.5	21.1
Treasury notes	17.9	(*c*)−9.7	(*c*)164.6	(*c*)−37.8	(*c*)1,689.1
Treasury bills—					
Internal	8.2	(*c*)−5.3	(*c*)−8.7	(*c*)−94.7	(*c*)79.4
Public	..	..	..	..	..
Total	*1,091.1*	*964.0*	*1,216.3*	*1,781.9*	*3,174.8*
Securities repayable in overseas currencies(*b*)	125.0	161.0	116.0	16.1	235.1
Total new securities issued	**1,216.1**	**1,125.0**	**1,332.3**	**1,797.9**	**3,409.9**

For footnotes *see* next page.

NET MOVEMENT IN GOVERNMENT SECURITIES ON ISSUE—*continued*

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
REDEMPTIONS, REPURCHASES, CANCELLATIONS(*d*)					
Securities repayable in Australian currency—					
Inscribed stock and bonds	612.4	225.4	246.4	615.0	478.2
Special bonds	148.8	83.8	75.7	363.6	374.8
Drought bonds	0.7	0.3	0.2	0.3	0.9
Advance loan subscriptions	..	..	..	..	..
Overdue securities	1.2	1.4	−0.2	−0.5	0.2
Tax-free stock	..	0.1	0.4	0.1	..
Debentures	2.7	2.8	3.0	3.1	3.2
Stock issued to Government Savings banks under special agreements(*a*)	4.0	4.1	4.1	4.8	4.4
Treasury notes	..	..	..	..	..
Treasury bills—					
Internal	..	..	..	..	..
Public	..	..	..	..	..
Total	*769.8*	*317.8*	*329.5*	*986.4*	*861.8*
Securities repayable in overseas currencies(*b*)	159.3	264.4	293.6	249.1	84.4
Total redemptions, etc.	**929.1**	**582.2**	**623.1**	**1,235.5**	**946.2**
NET MOVEMENT					
Securities repayable in Australian currency—					
Inscribed stock and bonds	195.9	589.4	624.1	801.4	576.7
Special bonds	84.4	55.4	33.5	90.6	−31.7
Drought bonds	−0.3	−0.1	0.6	2.9	0.6
Advance loan subscriptions	8.2	0.4	11.6	−8.0	−14.3
Overdue securities	−1.2	−1.4	0.2	0.5	−0.2
Tax-free stock	..	−0.1	−0.4	−0.1	..
Debentures	−2.7	−2.8	−3.0	−3.1	−3.2
Stock issued to Government Savings banks under special agreements(*a*)	11.0	20.4	64.3	43.7	16.7
Treasury notes	17.9	−9.7	164.6	−37.8	1,689.1
Treasury bills—					
Internal	8.2	−5.3	−8.7	−94.7	79.4
Public	..	..	..	..	..
Total	*321.3*	*646.2*	*886.7*	*795.5*	*2,313.0*
Securities repayable in overseas currencies(*b*)	−34.3	−103.4	−177.6	−233.1	150.7
Net movement in securities on issue	**287.0**	**542.7**	**709.1**	**562.4**	**2,463.7**

(*a*) Recorded in Commonwealth Government Loan Fund as State domestic raisings. (*b*) Australian currency equivalent at rates of exchange ruling at 30 June in each of the years shown. (*c*) Net issue. (*d*) Includes conversions from one type of security to another, which affect the net movements of individual loan categories, but do not affect the overall net movement.

The net movement in securities on issue may be reconciled with the Budget deficit, as shown in the following table. For details relating to the financing of the budget deficit *see* page 559.

RECONCILIATION OF DEFICIT WITH NET MOVEMENT IN SECURITIES ON ISSUE

($ million)

(*Source:* Supplement to the *Treasury Information Bulletin*, August 1975)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Net movement in securities on issue	287	543	709	562	2,464
Less net increase in securities on issue held by Trust Fund(*a*)	−88	58	20	27	−508
	199	601	729	590	1,956
Adjustment from face value to cash basis	(*b*)−21	(*b*)64	(*b*)114	(*b*)67	(*b*)−139
	179	665	843	657	1,817
Less increases in net assets of Commonwealth Government—					
Cash balances	−157	−567	−175	−480	660
International Monetary Fund	−37	..	..	..	..
Other(*a*)	26	36	40	116	90
Deficit	**10**	**134**	**709**	**293**	**2,567**

(*a*) Excludes investment of other than Commonwealth Government balances in the Trust Fund. (*b*) Includes adjustment of Australian currency equivalent of overseas debt, following variations in the rates of exchange. *See Government on Issue at 30 June 1971, 1972, 1973, 1974 and 1975.*

NET MOVEMENT IN GOVERNMENT SECURITIES ON ISSUE, 1974-75

($ million)

		Change during 1974–75			
	Securities on issue at 30 June 1974	*New securities issued*	*Redemptions, repurchases, cancellations (a)*	*Securities on issue at 30 June 1975*	*Net movement*
Securities repayable in Australian currency—					
Commonwealth Government—					
Inscribed stock and bonds	1,686.5	190.5	−263.8	1,613.1	−73.3
Special bonds	249.9	114.2	−117.7	246.5	−3.4
Drought bonds	4.0	1.5	−0.9	4.6	+0.6
Advance loan subscriptions	17.6	(*a*)−14.3	..	3.3	−14.3
Overdue securities	4.5	..	−0.3	4.2	−0.3
Treasury notes	386.9	(*d*)1,689.1	..	2,076.0	+1,689.1
Treasury bills—Internal	930.8	(*d*)79.4	..	1,010.2	+79.4
Total	*3,280.2*	*2,060.4*	*−382.7*	*4,957.9*	*+1,677.7*
States—					
Inscribed stock and bonds	9,792.3	864.4	−214.4	10,442.4	+650.1
Special bonds	747.4	228.8	−257.1	719.1	−28.3
Tax-free stock	15.3	..	..	15.3	..
Stock issued to Government Savings banks under special agreement(*b*)	405.4	21.1	−4.4	422.0	+16.7
Debentures	33.5	..	−3.2	30.3	−3.2
Overdue securities	0.2	..	+0.1	0.4	+0.1
Total	*10,994.2*	*1,114.3*	*−479.1*	*11,629.5*	*+635.3*
Total securities repayable in Australian currency	**14,274.5**	**3,174.8**	**−861.8**	**16,587.5**	**+2,313.0**
Securities repayable in overseas currencies(*c*)—					
Commonwealth Government—					
Public loans	393.5	160.0	+46.4	599.9	+206.4
Export-Import Bank loans	12.2	..	+0.5	12.6	+0.5
Defence loans	126.4	..	−29.1	97.3	−29.1
International Bank Loans	64.2	..	+0.2	64.4	+0.2
Private loans—					
Aircraft	116.5	48.6	+8.1	173.2	+56.7
Other purposes	94.5	26.4	−70.2	50.8	−43.8
Total	807.3	235.1	−44.2	998.2	+190.9
States	224.5	..	−40.3	184.2	−40.3
Total securities repayable in overseas currencies	1,031.8	235.1	−84.4	1,182.5	+150.7

(*a*) Includes conversions from one type of security to another. (*b*) i.e. State domestic raisings. (*c*) Australian currency equivalents at rates of exchange ruling at 30 June 1975. (*d*) Net issue.

Government securities on issue, annual interest payable, and average rate of interest

The following tables provide details of government securities on issue on account of the Commonwealth Government and the States, repayable in Australian and in overseas currencies, and show, for recent years, the securities on issue maturing in Australia classified by holder. Also shown are details of annual interest payable on securities on issue in Australia and overseas, and the average rate of interest liability.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH GOVERNMENT AND STATES
($ million)

	30 June—				
	1971	*1972*	*1973*	*1974*	*1975*
For Commonwealth Government purposes—					
Repayable in Australian currency—					
Inscribed stock and bonds	1,147.6	1,165.7	1,233.2	1,686.5	1,613.1
Special bonds	238.9	252.5	262.9	249.9	246.5
Drought bonds	0.7	0.6	1.1	4.0	4.6
Advance loan subscriptions	13.6	14.0	25.6	17.6	3.3
Overdue securities	5.4	4.0	3.8	4.5	4.2
Treasury notes	269.8	260.1	424.7	386.9	2,076.0
Treasury bills—					
Internal	1,039.5	1,034.2	1,025.5	930.8	1,010.2
Public	..	..	..	..	..
Total	*2,715.5*	*2,731.0*	*2,976.8*	*3,280.2*	*4,957.9*
Repayable in overseas currencies(*a*)	1,085.4	1,076.9	986.2	807.3	998.2
Total Commonwealth Government	*3,800.9*	*3,807.9*	*3,963.0*	*4,087.5*	*5,956.2*
On account of States—					
Repayable in Australian currency—					
Inscribed stock and bonds	8,316.3	8,887.6	9,444.2	9,792.3	10,442.4
Special bonds	578.9	620.8	643.9	747.4	719.1
Tax-free stock	16.0	15.8	15.4	15.3	15.3
Stock issued to Government Savings banks under special agreements	277.0	297.4	361.7	405.4	422.0
Debentures	42.4	39.6	36.6	33.5	30.3
Overdue securities	..	..	0.4	0.2	0.4
Total	*9,230.6*	*9,861.2*	*10,502.2*	*10,994.2*	*11,629.5*
Repayable in overseas currencies(*a*)	460.5	365.6	278.6	224.5	184.2
Total States	*9,691.1*	*10,226.8*	*10,780.8*	*11,218.7*	*11,813.8*
of Which—					
New South Wales	3,192.9	3,359.4	3,528.6	3,654.4	3,834.1
Victoria	2,347.8	2,488.3	2,632.9	2,746.6	2,896.2
Queensland	1,289.5	1,355.7	1,427.8	1,485.0	1,576.7
South Australia	1,256.9	1,332.0	1,409.7	1,473.3	1,551.3
Western Australia	932.6	981.4	1,029.9	1,070.9	1,121.6
Tasmania	671.3	709.9	752.0	787.6	833.9
Total Commonwealth Government and States	13,492.0	14,034.7	14,743.8	15,306.2	17,769.9

(*a*) Australian currency equivalent.

GOVERNMENT SECURITIES ON ISSUE(*a*): COMMONWEALTH GOVERNMENT AND STATE MATURING IN AUSTRALIA, BY HOLDER

($ million)

(*Source:* Reserve Bank of Australia *Statistical Bulletin*)

	30 June—				
Holder	*1971*	*1972*	*1973*	*1974*	*1975*
Reserve Bank of Australia	910	501	611	1,443	1,276
Trading banks	1,412	1,788	2,298	2,221	3,663
Savings banks	2,337	2,380	2,787	2,943	2,924
Other banking institutions	1	3	6	6	4
Life assurance offices	1,325	1,483	1,632	1,786	1,862
Fire, marine and general insurance offices	120	117	121	123	125
Other private financial institutions—					
Pension and provident funds	249	290	319	371	421
Friendly societies, hospital and medical funds	31	34	35	37	36
Trustee companies	108	109	109	105	96
Pastoral finance companies	16	14	9	3	1
Money market dealers	694	983	731	350	733
Miscellaneous	74	111	100	96	113
Government financial institutions—					
Insurance offices and funds	154	163	198	219	223
Pension and provident funds	238	271	298	282	323
Public trustees	26	24	25	26	41
All other(*b*)	3	3	2	3	8
Public authorities (excluding finance)—					
Commonwealth Government (including Commonwealth semi-government)	2,661	2,586	2,556	2,524	3,010
State Government	39	42	54	51	42
Local government and State semi-government	191	177	174	178	163
Companies (excluding finance)	118	253	214	144	145
Other holders—					
Marketing boards	3	2	2	2	2
Farmers	76	73	69	70	63
Non-profit organisations	50	50	50	50	46
All other	1,107	1,135	1,080	1,241	1,270
Total	**11,946**	**12,592**	**13,479**	**14,274**	**16,587**

(*a*) Total stock inscribed, bonds in circulation, amounts paid up on outstanding applications, in transit claims and advance applications. Commonwealth Government Treasury Bills and Treasury Notes, debentures, and Savings Certificates. (*b*) Includes securities held by Commonwealth Development Bank of Australia.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH GOVERNMENT AND STATES REPAYABLE IN OVERSEAS CURRENCIES

		30 June—				
		1971	*1972*	*1973*	*1974*	*1975*
For Commonwealth Government purposes—						
Sterling	£stg m	69.2	68.3	60.9	58.6	55.4
United States dollars	US$ m	691.9	689.1	617.6	483.2	486.7
Canadian dollars	Can$ m	12.3	5.2	2.3	1.9	1.8
Swiss francs	Sw F m	249.6	249.6	347.6	345.6	479.0
Netherlands guilders	f. m	65.2	64.8	64.3	63.8	63.3
Deutsche marks	DM m	931.2	1,026.1	1,018.8	974.8	1,041.0
European units of account	EuA m	..	15.0	15.0	14.0	13.5
Japanese yen	Yen m	..	..	10,000.0	10,000.0	10,000.0
Total—Australian currency equivalent(a)	*$A m*	*1,085.4*	*1,076.9*	*986.2*	*807.3*	*998.2*
On account of States—						
Sterling	£stg m	149.7	120.9	105.9	93.9	64.6
United States dollars	US$ m	126.2	107.4	85.9	75.7	65.2
Canadian dollars	Can$ m	11.6	10.9	10.2	9.9	9.2
Swiss francs	Sw F m	50.3	50.3	50.3	50.3	50.3
Netherlands guilders	f. m	24.1	21.9	19.7	17.5	15.3
Total—Australian currency equivalent(a)	*$A m*	*460.5*	*365.6*	*278.6*	*224.5*	*184.2*
Total—Commonwealth Government and States—Australian currency equivalent(*a*)	$A m	1,545.9	1,442.5	1,264.9	1,031.8	1,182.5

(*a*) Australian currency equivalent at rates of exchange ruling at 30 June in each of the years shown.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH GOVERNMENT AND STATES REPAYABLE IN OVERSEAS CURRENCIES, 30 JUNE 1975

	Currency in which repayable								*Total—Australian currency equivalent (a)*
	Sterling	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	*Japanese yen*	*European units of account*	
	£stg m	US$ m	Can$ m	Sw F m	f m	DM m	Yen m	Eu A. m	$A m
For Commonwealth Government purposes—									
Public loans	55.4	160.9	1.8	239.7	3.3	849.1	10,000.0	13.5	599.9
Export-Import Bank loans—									
Defence equipment	..	128.9	..	..	..	..	..	..	97.3
Aircraft	..	93.4	..	..	..	..	..	..	70 5
Other	..	16.8	..	..	..	..	..	..	12.6
International Bank loans	..	59.0	..	..	..	61.9	..	..	64.4
Private loans—									
Aircraft	..	27.7	..	239.3	..	30.0	..	..	102.7
Other purposes	..	..	..	..	60.0	100.0	..	..	50.8
Total	*55.4*	*486.7*	*1.8*	*479.0*	*63.3*	*1,041.0*	*10,000.0*	*13.5*	*998.2*
On account of States—									
New South Wales	34.7	26.4	2.9	15.8	4.8	..	..	..	86.6
Victoria	11.5	12.5	2.3	12.7	3.9	..	..	..	35.5
Queensland	5.6	10.5	1.2	6.4	2.0	..	..	..	20.7
South Australia	6.1	7.1	1.2	6.8	2.0	..	..	..	19.2
Western Australia	4.7	3.7	0.9	4.9	1.5	..	..	..	13.3
Tasmania	1.9	5.0	0.7	3.7	1.1	..	..	..	8.9
Total	*64.6*	*65.2*	*9.2*	*50.3*	*15.3*	..	..	..	*184.2*
Total Commonwealth Government and States	120.1	551.9	11.0	529.3	78.7	1,041.0	10,000.0	13.5	1,182.5

(*a*) At rates of exchange ruling at 30 June 1975.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH GOVERNMENT AND STATES ANNUAL INTEREST PAYABLE

AMOUNT

		30 June—				
		1971	*1972*	*1973*	*1974*	*1975*
For Commonwealth Government purposes—						
Australian currency	$A m	99.5	99.4	113.0	172.5	244.8
Sterling	£Stg m	3.9	3.8	3.4	3.3	3.1
United States dollars	US$ m	38.1	40.1	37.0	30.0	32.3
Canadian dollars	Can$ m	0.6	0.3	0.1	0.1	0.1
Swiss francs	SwF m	13.6	13.6	19.5	19.4	34.3
Netherlands guilders	f m	4.9	4.9	4.9	4.8	4.8
Deutsche marks	DM m	60.6	67.3	66.8	63.9	80.5
European units of account	EuA m	..	1.2	1.2	1.1	1.1
Japanese yen	Yen m	..	..	690.0	690.0	690.0
Total Commonwealth Government—Australian currency equivalent(a)	*$A m*	*162.0*	*164.1*	*173.7*	*223.0*	*314.9*
On account of States—						
Australian currency	$A m	496.1	542.6	578.9	638.6	734.1
Sterling	£Stg m	6.9	5.7	4.9	4.4	3.5
United States dollars	US$ m	6.8	5.8	4.7	4.1	3.6
Canadian dollars	Can$ m	0.7	0.6	0.6	0.6	0.5
Swiss francs	SwF m	2.3	2.3	2.3	2.3	2.3
Netherlands guilders	f m	1.2	1.1	1.0	0.9	0.8
Total States—Australian currency equivalent(a)	*$A m*	*518.3*	*560.5*	*592.3*	*649.6*	*744.1*
Total Commonwealth Government and States—Australian currency equivalent(a)	**$A m**	**680.2**	**724.6**	**766.1**	**872.6**	**1,059.0**

AVERAGE RATE OF INTEREST LIABILITY

(Per cent)

	1971	*1972*	*1973*	*1974*	*1975*
For Commonwealth Government purposes—					
Australian currency	3.66	3.64	3.80	5.26	4.94
Sterling	5.57	5.59	5.59	5.58	5.56
United States dollars	5.50	5.82	5.98	6.21	6.64
Canadian dollars	5.18	5.51	5.88	5.75	5.75
Swiss francs	5.44	5.44	5.61	5.61	7.17
Netherlands guilders	7.53	7.55	7.57	7.59	7.61
Deutsche marks	6.51	6.56	6.55	6.56	7.73
European units of account	..	8.00	8.00	8.00	8.00
Japanese yen	..	..	6.90	6.90	6.90
Total Commonwealth Government—Australian currency equivalent(a)	*4.26*	*4.31*	*4.38*	*5.46*	*5.29*
On account of States—					
Australian currency	5.37	5.50	5.51	5.81	6.31
Sterling	4.59	4.68	4.60	4.71	5.45
United States dollars	5.36	5.39	5.46	5.47	5.47
Canadian dollars	5.75	5.75	5.75	5.75	5.75
Swiss francs	4.50	4.50	4.50	4.50	4.50
Netherlands guilders	5.00	5.00	5.00	5.00	5.00
Total States—Australian currency equivalent(a)	*5.35*	*5.48*	*5.49*	*5.79*	*6.30*
Total Commonwealth Government and States—Australian currency equivalent(a)	**5.04**	**5.16**	**5.20**	**5.70**	**5.96**

(*a*) At rates of exchange ruling at 30 June in each of the years shown.

GOVERNMENT SECURITIES ON ISSUE: COMMONWEALTH GOVERNMENT AND STATES ANNUAL INTEREST PAYABLE, 30 JUNE 1975

	Currency in which payable									*Total—Australian currency equivalent(a)*
	Australian currency	*Sterling*	*United States dollars*	*Canadian dollars*	*Swiss francs*	*Netherlands guilders*	*Deutsche marks*	*European units of account*	*Japanese yen*	
	$A m	£Stg m	US$ m	Can$ m	Sw F m	f m	DM m	Eu A m	Y m	$A m
For Commonwealth Government purposes .	244.8	3.1	2.3	0.1	34.3	4.8	80.5	1.1	690.0	314.9
On account of States—										
New South Wales .	238.4	1.9	1.4	0.2	0.7	0.2	..	..	..	243.2
Victoria . . .	181.9	0.6	0.7	0.1	0.6	0.2	..	..	..	183.8
Queensland . . .	93.1	0.3	0.6	0.1	0.3	0.1	..	..	..	94.2
South Australia . .	97.6	0.3	0.4	0.1	0.3	0.1	..	..	..	98.5
Western Australia . .	70.8	0.2	0.2	0.1	0.2	0.1	..	..	..	71.5
Tasmania . . .	52.3	0.1	0.3	..	0.2	0.1	..	..	..	52.8
Total States . .	*734.1*	*3.5*	*3.6*	*0.5*	*2.3*	*0.8*	..	..	..	*744.1*
Total—										
Currencies in which repayable . .	979.0	6.6	35.9	0.6	36.6	5.6	80.5	1.1	690.0	..
Australian currency equivalent(*a*) $A m	979.0	11.1	27.1	0.5	11.0	1.7	25.9	1.0	1.8	1,059.0

AVERAGE RATE OF INTEREST LIABILITY

(Per cent)

For Commonwealth Government purposes .	4.94	5.56	6.64	5.75	7.17	7.61	7.73	8.00	6.90	5.29
On account of States—										
New South Wales . .	6.36	5.59	5.44	5.75	4.50	5.00	..	..	..	6.34
Victoria . . .	6.36	5.52	5.45	5.75	4.50	5.00	..	..	..	6.35
Queensland . . .	5 98	5.59	5.56	5.75	4.50	5.00	..	..	..	5.98
South Australia . .	6.37	4.57	5.49	5.75	4.50	5.00	..	..	..	6.35
Western Australia . .	6.39	5.21	5.38	5.75	4.50	5.00	..	..	..	6.37
Tasmania . . .	6.34	5.53	5.55	5.75	4.50	5.00	..	..	..	6.33
Total States . .	6.31	5.45	5.47	5.75	4.50	5.00	..	..	..	6.30

(*a*) At rates of exchange ruling at 30 June 1975.

National Debt Sinking Fund

Securities on issue on behalf of the Commonwealth Government

The National Debt Sinking Fund was established by the *National Debt Sinking Fund Act* 1923 and came into operation on 11 August 1923. Particulars of the creation and operation of sinking funds by that Act are included in issues of the Year Book prior to No. 23. The *National Debt Sinking Fund Act* 1966 repealed all previous legislation on sinking funds relating to securities on issue on behalf of the Commonwealth Government. Under the Act of 1966 the period of redemption is 25 years from 1 July 1966 for debt outstanding at 30 June 1966 and 25 years for net debt created in subsequent years.

Broadly, the amounts payable to the National Debt Sinking Fund each year are made up of contributions from the Consolidated Revenue Fund of the Commonwealth Government as follows:

(*a*) an amount of $30.94 million each year for a period of 25 years;

(*b*) an amount equal to 4 per cent of the amount of net debt created (if any) in any year for a period of 25 years.

In addition, an amount equal to specified receipts by the Commonwealth Government in repayment of loans or advances made out of moneys in the Loan Fund will be paid to the Sinking Fund.

The amounts payable to the Fund in any year from Consolidated Revenue Fund are to be reduced by the following:

(*a*) the net income from investments in any year; and

(*b*) an amount equal to 4 per cent of the amount of the net reduction of debt in any year.

Particulars of receipts and expenditure of the Commonwealth Government Account for the years 1970–71 to 1974–75 are as follows.

NATIONAL DEBT SINKING FUND: COMMONWEALTH GOVERNMENT ACCOUNT
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Receipts—					
From Consolidated Revenue	21,061	17,812	22,012	37,276	42,847
Loans and advances repaid	272,483	157,376	84,333	19,599	21,479
Interest on investments	2,968	1,359	995	655	698
Total receipts	**296,512**	**176,547**	**107,340**	**57,529**	**65,023**
Expenditure (net cost)—					
Securities repurchased and redeemed in—					
Australia	293,179	149,373	87,577	16,215	45,455
London	1,230	1,737	14,303	2,511	3,854
New York(*a*)	22,941	26,207	17,854	25,030	13,096
Canada	90	93	89	32	91
Netherlands	119	124	124	116	140
Germany	..	..	707	10,345	16,200
Total expenditure	**317,558**	**177,534**	**120,655**	**54,249**	**78,836**
Balance at 30 June	61,565	60,578	47,263	50,543	36,730
Face value of securities repurchased and redeemed in—					
Australia	294,367	149,513	87,747	17,321	47,319
London	1,436	1,887	13,649	3,600	5,334
New York(*a*)	23,771	26,438	16,340	25,298	14,268
Canada	101	108	94	39	102
Netherlands	119	123	128	121	148
Germany	..	..	792	11,231	18,546
Total face value	**319,794**	**178,069**	**118,750**	**57,610**	**85,717**

(*a*) Includes instalment repayments of loans from International Bank for Reconstruction and Development; 1970–71—face value, $13.2m, net cost, $13.1m; 1971–72—face value, $12.9m, net cost, $13.1m; 1972–73—face value, $6.1m, net cost, $6.8m; 1973–74—face value, $4.5m, net cost, $4.6m; 1974–75—face value, $5.3m, net cost, $4.9m.

Securities on issue on behalf of States

A sinking fund for the redemption of the securities on issue on behalf of States was established under the Financial Agreement. Particulars of the transactions of the National Debt Sinking Fund (States' Account) for each State during the year 1974–75 and for all States during the years 1970–71 to 1974–75 are shown in the following tables.

NATIONAL DEBT SINKING FUND: STATES' ACCOUNT, 1974-75
($'000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
Receipts—							
Contributions under Financial Agreement—							
Commonwealth	10,079	7,525	4,012	4,072	2,976	2,141	30,805
States	39,844	28,823	15,045	15,361	12,317	6,805	118,194
Interest from States on cancelled securities	48	16	11	8	7	6	96
Special contributions by States	63	14	9	..	6	..	92
Interest on investments, etc.	62	49	19	36	31	15	213
Total receipts	**50,096**	**36,427**	**19,097**	**19,477**	**15,336**	**8,967**	**149,400**
Expenditure (net cost)—							
Securities repurchased and redeemed in—							
Australia	32,591	36,297	14,011	13,978	6,962	8,096	111,935
London	19,280	539	3,931	8,661	11,648	1,048	45,107
New York	2,789	1,426	943	736	481	448	6,823
Canada	147	118	59	63	45	34	465
Netherlands	204	164	83	82	64	47	644
Total expenditure	**55,010**	**38,544**	**19,028**	**23,520**	**19,199**	**9,674**	**164,975**
Balance at 30 June 1975	1,578	1,774	1,482	1,516	1,037	1,268	8,654
Face value of securities repurchased and redeemed in—							
Australia	32,602	36,299	14,011	13,978	6,962	8,096	111,948
London(*a*)	22,592	926	4,610	10,262	13,713	1,380	53,483
New York(*a*)	1,762	890	598	461	298	283	4,291
Canada(*a*)	92	74	37	39	28	21	293
Netherlands(*a*)	114	92	47	46	36	27	362
Total face value	**57,163**	**38,281**	**19,304**	**24,787**	**21,036**	**9,807**	**170,378**

(*a*) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

NATIONAL DEBT SINKING FUND: STATES' ACCOUNT
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Receipts—					
Contributions under Financial Agreement—					
Commonwealth	24,550	26,323	27,979	29,509	30,805
States	90,162	96.572	103,792	110,735	118,194
Interest from States on cancelled securities	162	139	144	139	96
Special contributions by States	123	107	107	92	92
Interest on investments, etc.	70	140	174	308	213
Total receipts	**115,067**	**123,280**	**132,195**	**140,783**	**149,400**
Expenditure (net cost)—					
Securities repurchased and redeemed in—					
Australia	87,693	94,374	94,131	100,439	111,935
London	10,824	11,574	25,939	17,876	45,107
New York	11,841	14,999	15,474	6,300	6,823
Canada	462	486	459	164	465
Netherlands	547	571	571	532	644
Total expenditure	**111,367**	**122,005**	**136,575**	**125,311**	**164,975**
Balance at 30 June	11,862	13,137	8,757	24,229	8,654
Face value of securities repurchased and redeemed in—					
Australia	87,705	94,392	94,215	100,473	111,948
London(*a*)	11,438	11,496	30,008	24,131	53,483
New York(*a*)	5,995	7,728	8,829	4,217	4,291
Canada(*a*)	245	271	283	119	293
Netherlands(*a*)	362	362	362	362	362
Total face value	**105,745**	**114,250**	**133,697**	**129,300**	**170,378**

(*a*) Converted in accordance with the Financial Agreement at the equivalent of the mint par of exchange prevailing on 1 July 1927.

State and Local Authorities' Indebtedness

The statistics of indebtedness of State and local authorities set out in the two following tables have been compiled from returns supplied by all local authorities (including New South Wales County Councils), and by autonomous and semi-autonomous State authorities which have independent borrowing powers, i.e. the power to borrow other than by having Commonwealth Government securities issued on their behalf—and which have in fact exercised these powers in borrowing from the public under the provisions of the Loan Council's 'Gentleman's Agreement'.

For further details see the bulletin *Local Authorities and Public Corporations: Debt* (5.36).

The State authorities covered by these statistics include the authorities responsible for providing the following services.

New South Wales. Water Supply, Sewerage and Drainage, Electricity and Gas Supply, Fire Brigades, Banking, Housing, Harbours, Grain Elevators, Roads and Bridges, Marketing, Industry Assistance, and Miscellaneous.

Victoria. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity and Gas Supply, Roads and Bridges, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, and Housing.

Queensland. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity Supply, Fire Brigades, University, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

South Australia. Irrigation and Drainage, Transport, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, University, and Miscellaneous.

Western Australia. Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University, and Miscellaneous.

Tasmania. Harbours, Electricity Supply, Fire Brigades, Transport, Housing, Industry Assistance, and Water Supply.

In the tables which follow, debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalised), trade creditors, amounts held in trust, and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised from the public to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of existing debt are excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

At the time of the preparation of this issue of the Year Book, these statistics were being reviewed with the aim of developing more comprehensive statistics of indebtedness of State and local authorities. Pending the results of this project it has not been practicable to present in the tables following statistics for years later than 1970–71.

STATE AND LOCAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION AND DEBT

($ million)

	1966–67	*1967–68*	*1968–69*	*1969–70*	*1970–71*
STATE AUTHORITIES					
New money loan raisings—					
From government	149.1	171.3	187.5	200.1	191.7
From public	221.4	246.5	293.6	275.2	319.3
Total loan raisings	**370.5**	**417.8**	**481.0**	**475.3**	**511.0**
Funds provided for redemption—					
Government loans	26.2	29.0	28.4	31.1	36.5
Loans due to public	43.1	63.3	66.0	67.5	74.6
Total funds for redemption	**69.3**	**92.3**	**94.4**	**98.6**	**111.1**
Accumulated sinking fund balance	178.6	196.5	214.8	233.3	240.7
Debt—					
Due to government	2,299.0	2,441.2	2,600.7	2,769.8	2,930.8
Due to banks (net overdraft)	7.5	7.0	9.4	9.0	7.4
Due to public(*a*)	2,677.0	2,878.5	3,130.2	3,357.9	3,614.0
Total debt	**4,983.5**	**5,326.7**	**5,740.3**	**6,136.8**	**6,552.2**
of which—					
Maturing overseas(*a*)	11.8	5.8	1.6	..	1.4
LOCAL AUTHORITIES					
New money loan raisings—					
From government	5.5	5.6	8.6	8.2	6.6
From public	157.6	178.4	184.3	179.5	191.0
Total loan raisings	**162.8**	**184.0**	**192.9**	**187.7**	**197.6**
Funds provided for redemption—					
Government loans	3.9	3.7	3.5	3.4	3.4
Loans due to public	66.6	71.9	79.0	85.4	89.0
Total funds for redemption	**70.5**	**75.6**	**82.5**	**88.8**	**92.4**
Accumulated sinking fund balance	73.8	81.3	91.5	97.7	107.9
Debt—					
Due to government	58.3	60.2	65.0	69.9	72.9
Due to banks (net overdraft)	9.2	4.3	4.8	3.8	3.3
Due to public(*a*)	1,215.4	1,328.0	1,443.2	1,545.2	1,654.3
Total debt	**1,282.9**	**1,392.5**	**1,513.0**	**1,618.8**	**1,730.5**
of which—					
Maturing overseas(*a*)	4.3	3.6	3.2	2.8	2.5

(*a*) Includes debt payable in London and New York, converted to Australian currency equivalent at the I.M.F. rates of exchange applying as at 30 June in each of the years shown.

STATE AND LOCAL AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION DEBT AND INTEREST PAYABLE, 1970-71

($ million)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
STATE AUTHORITIES							
New money loan raisings—							
From government	34.8	52.4	3.2	34.5	35.9	30.8	191.7
From public	84.8	142.8	42.9	20.2	18.7	9.9	319.3
Total loan raisings	**119.5**	**195.2**	**46.1**	**54.8**	**54.6**	**40.7**	**511.0**
Funds provided for redemption—							
Government loans	11.0	8.9	3.6	7.2	2.2	3.6	36.5
Loans due to public	21.1	35.2	12.0	1.2	2.6	2.5	74.6
Total funds for redemption	**32.1**	**44.1**	**15.6**	**8.4**	**4.8**	**6.1**	**111.1**
Accumulated sinking fund balance	132.7	70.6	22.7	0.1	8.0	6.5	240.7
Debt—							
Due to government	637.3	862.6	84.0	504.3	446.5	396.1	2,930.8
Due to banks (net overdraft)	2.6	0.7	..	0.1	3.9	..	7.4
Due to public creditor (*a*)	872.3	1,872.7	410.5	219.6	152.4	86.5	3,614.0
Total debt(*a*)	**1,512.1**	**2,736.1**	**494.5**	**724.1**	**602.8**	**482.6**	**6,552.2**
of which—							
Maturing overseas(*a*)	..	1.4	..	..	..	..	1.4
Annual interest payable(*a*)	81.6	146.6	28.3	37.6	32.8	24.7	351.6
LOCAL AUTHORITIES							
New money loan raisings—							
From government	0.2	0.5	4.9	0.9	..	..	6.6
From public	83.2	26.1	48.7	10.3	15.7	6.9	191.0
Total loan raisings	**83.5**	**26.6**	**53.6**	**11.3**	**15.7**	**7.0**	**197.6**
Funds provided for redemption—							
Government loans	0.6	0.2	1.8	0.7	..	..	3.4
Loans due to public	39.7	16.3	20.5	2.9	6.4	3.4	89.0
Total funds for redemption	**40.3**	**16.5**	**22.3**	**3.5**	**6.4**	**3.4**	**92.4**
Accumulated sinking fund balance	50.2	16.4	38.8	0.3	..	2.2	107.9
Debt—							
Due to government	6.2	8.0	50.8	6.9	..	0.9	72.9
Due to banks (net overdraft)	1.8	1.4	..	0.1	..	..	3.3
Due to public creditor(*a*)	763.4	237.3	434.1	62.1	82.6	74.8	1,654.3
Total debt(*a*)	**771.4**	**246.7**	**484.9**	**69.1**	**82.6**	**75.8**	**1,730.5**
of which—							
Maturing overseas(*a*)	..	..	2.5	..	..	..	2.5
Annual interest payable(*a*)	43.5	14.4	28.2	4.0	5.0	4.4	99.5

(*a*) Includes debt or interest payable in London and New York, converted to Australian currency equivalent at the I.M.F. rates of exchange applying as at 30 June 1971.

Aggregate debt of State and local authorities

The following table brings together figures of Commonwealth Government securities on issue on account of the States, debt outstanding of State authorities which have borrowed directly, and debt outstanding of local authorities, to provide an indication of the level of indebtedness of the public authorities in each State. It should be noted, however, that for the kinds of reasons outlined on page 617, this aggregation of figures for securities on issue and debt outstanding cannot be taken as a measure of the 'net public debt' of the State and local authorities. In order to measure this latter magnitude it would be necessary to identify and deduct the substantial holdings of Commonwealth Government, State and local securities which represent the investment by these authorities of reserve funds and trust and other funds which they administer. In addition, it would be necessary to include the indebtedness of the State authorities to the Commonwealth Government in respect of advances made for specific capital purposes (such as those made under the Commonwealth–State Housing Agreements). For some purposes too it might be necessary to identify and deduct any loans outstanding from governments to other sectors.

STATE AND LOCAL AUTHORITIES' INDEBTEDNESS, 30 JUNE 1967 TO 1971

	State authorities			
	Commonwealth Government securities issued on account of States	*State authorities' own borrowings(a)*	*Local authorities(a)*	*Total*
	AMOUNT OUTSTANDING ($ million)(b)			
30 June 1971—				
New South Wales	3,192.9	874.8	765.2	4,832.9
Victoria	2,347.8	1,873.5	238.7	4,460.0
Queensland	1,289.5	410.5	434.1	2,134.1
South Australia	1,256.9	219.8	62.2	1,538.9
Western Australia	932.6	156.3	82.6	1,171.5
Tasmania	671.3	86.5	74.9	832.7
All States, 30 June 1971	**9,691.1**	**3,621.4**	**1,657.6**	**14,970.1**
1970	9,320.1	3,365.2	1,548.9	14,234.3
1969	8,830.5	3,139.6	1,447.9	13,418.0
1968	8,316.5	2,885.5	1,332.3	12,534.3
1967	7,934.1	2,684.5	1,224.6	11,843.2
	PER HEAD OF POPULATION ($)(b)			
30 June 1971—				
New South Wales	693.9	190.1	166.3	1,050.4
Victoria	670.3	534.9	68.2	1,273.4
Queensland	705.8	224.7	237.6	1,168.0
South Australia	1,070.9	187.3	53.0	1,311.2
Western Australia	905.0	151.7	80.2	1,136.8
Tasmania	1,719.5	221.6	191.9	2,132.9
All States, 30 June 1971	**773.7**	**289.1**	**132.3**	**1,195.2**
1970	763.8	275.8	126.9	1,166.6
1969	738.5	262.6	121.1	1,122.2
1968	708.5	245.8	113.5	1,067.9
1967	687.3	232.5	106.1	1,025.9

(a) Amounts due to central government have been excluded. (b) Debts repayable overseas have been converted to the Australian currency equivalent at IMF rates of exchange applying at 30 June in each of the years shown.

ROADS AND BRIDGES: WATER SUPPLY AND SEWERAGE: HARBOURS

As indicated elsewhere in this chapter, further details of the activities of public authorities engaged in particular fields of activity such as defence, transport and communication, health and welfare, education, electricity supply, banking, etc., may be found in other chapters of this Year Book which deal specifically with those subjects. However, it has been convenient for the time being to include in this chapter an account of the activities of authorities engaged in the fields of construction and maintenance of roads and bridges, provision of water supply and sewerage services and provision of harbour facilities. Particular attention is given to the activities of State authorities engaged in these fields.

Roads and Bridges

Primary responsibility for the construction and maintenance of roads and bridges rests with State and local authorities. In each State there exists a central road authority or a government department which undertakes construction, reconstruction and maintenance of declared 'main' and 'developmental' roads, and which administers the distribution of funds to local authorities and supervises and co-ordinates road construction throughout the State. Provision of roads and bridges has always been one of the principal functions of local authorities, and these authorities still account for a significant proportion of construction and maintenance activity, as is shown by figures given earlier in this chapter. However the relative importance of the contribution of local authorities has tended to decline in recent years, reflecting in part a reassessment of priorities in allocations of road finance. The Commonwealth Government is concerned with construction and maintenance of roads and bridges in the Northern Territory and Australian Capital Territory and roads of access to Commonwealth Government property in the various States; but the Commonwealth Government's most significant contribution to government activity in this field is in the assistance given to the States in the form of specific purpose capital grants, which constituted about 37 per cent of the total outlay by State and local authorities on roads and bridges in 1973–74.

In what follows, figures are provided of expenditure on road transport by all public authorities, Commonwealth Government grants for road purposes, and an account is given of the activities of the principal State authorities concerned with roads and bridges in each State. For details of mileages of roads open to traffic, classified according to class of road and road surface, *see* Chapter 12, Transport, and Communication.

All public authorities

The figures given in the following table provide an approximate measure of the aggregate net expenditure on roads and bridges by Commonwealth Government, State and local authorities in recent years. Expenditure on roads by those authorities whose primary activity is directed towards functions other than roads, e.g. electricity, forestry, housing, etc., is not included. The figures cover expenditure on the construction, reconstruction and maintenance of roads and bridges, and direct administration. Debt charges are not normally classified by function and are therefore excluded. Because a satisfactory and consistent distinction between new construction and maintenance cannot be made with existing data, all expenditure on roads and bridges is treated as capital expenditure.

ALL PUBLIC AUTHORITIES: GROSS FIXED CAPITAL EXPENDITURE ROAD SYSTEMS

($ million)

Year	*Commonwealth Government authorities*	*State and local authorities*						*All public authorities*
		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	
1969–70 .	19	191	162	98	51	56	19	596
1970–71 .	21	217	161	105	50	64	21	639
1971–72 .	19	245	170	116	59	74	22	705
1972–73 .	24	275	171	135	65	73	24	767
1973–74 .	26	307	200	155	68	82	26	864

Commonwealth Government Grants

The following table shows the allocations to the States of Commonwealth grants for road construction, maintenance, repair and other works connected with transport for each of the years 1970–71 to 1974–75. Prior to 1974–75 these grants were provided under the various Commonwealth Aid Roads Acts, and in 1974–75 under the National Roads Act, the Roads Grant Act, and the Transport (Planning and Research) Act.

COMMONWEALTH GRANTS TO THE STATES FOR ROAD SYSTEMS

($'000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Total*
1970–71 . .	64,980	43,460	39,560	23,500	36,270	10,230	218,000
1971–72 . .	74,500	49,820	45,360	25,500	39,250	10,820	245 250
1972–73 . .	85,590	57,240	52,110	28,000	43,910	12,150	279,000
1973–74 . .	98,270	65,720	59,830	31,000	48,030	13,950	316,800
1974–75 . .	115,792	75,951	75,372	31,888	50,449	18,585	368,037

New South Wales

Main roads administration is organised as a separate department under the control of a Commissioner. The activities of the Department of Main Roads include works on main, secondary, developmental and tourist roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed and maintained from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system.

During 1971–72 changes were made in the method of financing road construction. The New South Wales Government decided that as from 1 January 1972, the full cost of works carried out by the Department of Main Roads was to be met from the Department's own funds. Prior to this date, local councils, in the County of Cumberland were required to meet half the cost of secondary roads construction and a proportion of the cost of tourist roads; and in country districts, councils were required to meet a proportion of the cost of road and bridge construction and maintenance on roads other than State highways. The financial burden was therefore removed from councils in respect of works under the control of the Department of Main Roads. Councils continued to perform work on those roads for which they were responsible in the past.

The funds of the Department of Main Roads are derived principally from motor vehicle taxation, charges on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958, grants under Commonwealth Aid Roads Acts and subsequent Acts (*see* page 632), other grants from the State or Commonwealth Governments, and proceeds of a levy on municipal and shire councils in the County of Cumberland in accordance with the Main Roads Act, 1924. The State Government also makes repayable advances for Main Roads Department works, and since 1963 the Commissioner for Main Roads has had the power (with the approval of the Governor on the recommendation of the Treasurer) to borrow moneys. The figures shown below represent the aggregate revenue and expenditure of the following funds: the County of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Aid Roads Fund.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: REVENUE AND EXPENDITURE

($'000)

	1970–71	*1971-72*	*1972–73*	*1973–74*	*1974–75*
		REVENUE(*a*)			
Motor vehicle taxation, registration and licence fees	55,237	73,637	92,731	99,294	104,276
Grants—					
Commonwealth Road Grants	47,129	55,617	65,924	77,628	108,796
Other State and Commonwealth grants	2,400	655	1,886	2,048	8,821
Contributions by other departments and bodies	1,155	776	651	641	625
Local authorities' contributions—					
Under section 11 of Mains Roads Act	11,407	5,890	311	167	156
Other	275	645	425	381	436
Sydney-Newcastle Expressway Toll	2,271	2.564	2,653	3,626	4,235
Other	1,047	1,020	1,336	1,111	1,862
Total	**120,920**	**140,804**	**165,915**	**184,896**	**229,206**
		EXPENDITURE(*b*)			
Roads and bridges—					
Construction	92,154	98,055	113,987	126,761	162,465
Maintenance	22,661	26,364	29,956	35,333	43,540
Administration	7,373	9,413	9,949	11,184	12,804
Interest, exchange, etc., on debt	3,802	4,331	4,489	4,595	4,934
Other(*c*)	4,038	4,291	4,359	4,217	4,887
Total	**130,027**	**142,455**	**162,740**	**182,089**	**228,630**

(*a*) Excludes repayable advances by the State Government and private loans ($11,250,000 in 1970–71, $8,800,000 in 1971–72, $8,000,000 in 1972–73, $6,500,000 in 1973–74 and $10,000,000 in 1974–75) and transfers from Sydney Harbour Bridge Account for Expressway construction ($70,000 in 1970–71, $57,000 in 1971–72, $334,000 in 1972–73, $7,000 in 1973–74 and $3,000 in 1974–75). Expenditure from these amounts is fully reflected in expenditure. (*b*) Excludes debt redemption ($1,565,000 in 1970–71, $1,874,000 in 1971–72, $2,327,000 in 1972–73, $3,618,000 in 1973–74 and $2,719,000 in 1974–75). (*c*) Mainly purchase of assets not subject to annual depreciation charge. The purchase of other assets is omitted here because the depreciation charge for them is reflected each year in 'Roads and bridges'.

Toll facilities operated by the Department of Main Roads include the Sydney Harbour Bridge, the completed sections of the Sydney-Newcastle Expressway and the Southern Freeway.

The Sydney Harbour Bridge was opened for traffic on 19 March 1932, and has a main span of 503 metres with clearance for shipping of 52 metres. The deck, 49 metres wide, carries eight road traffic lanes, two railway tracks, one cycleway and one footway. During 1974-75, approximately 51 million private road vehicles, 23.7 million rail passengers and 11.2 million bus passengers crossed the bridge. Income from tolls during 1974-75 amounted to $5,299,000, including road tolls of $4,983,000, and a lump sum contribution of $316,000 for rail and bus passengers in lieu of the per capita toll charge.

The sections of the Sydney-Newcastle Expressway now open to traffic extend approximately 26 kilometres between Berowra and Calga. Total cost of the project was $36million. Toll collections during the year ended 30 June 1975 amounted to $4,235,000. Southern Freeway was opened to traffic on 24 July 1975 and extends for approximately 23 kilometres between Waterfall and Bulli Pass. Total cost of the tollway to 30 June 1975 was $22 million.

Victoria

With the object of improving the main roads of the State, the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine which roads should be declared in the various classifications; to supervise the construction, reconstruction and maintenance of these roads; to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance; and to recommend deviations in existing roads or the construction of new roads in order to facilitate communications or to improve the conditions of traffic.

The funds of the Country Roads Board are derived principally from motor registration fees, including a major portion of the fees credited for the Roads (Special Projects) Fund, a proportion of drivers' licence fees, payments by the Commonwealth Government under the Commonwealth Roads Acts and subsequent legislation (*see* page 632), roads charges under the Commercial Goods Vehicles Act, repayments by municipalities, and grants and loans from the State Government. From 1 July 1974, the Country Roads Board acquired from the Melbourne and Metropolitan Board of Works the latter's road-making powers, road assets, etc., plus relevant staff, thus increasing the scope of the Country Roads Board's responsibilities. Some of the major works taken over and being completed by the Country Roads Board are the construction of the Eastern Freeway from Collingwood to Bulleen, the Mulgrave Freeway and the Johnson Street Bridge in South Melbourne which will connect to the proposed Freeway F9 from the West Gate Bridge.

Major rural works currently being carried out by the Country Roads Board include the upgrading of the Hume Highway to freeway standard between Melbourne and Albury/Wodonga, and the construction of a bridge carrying the Princes Highway across the Snowy River at Orbost.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Motor Car Act—registration and licence fees (less cost of collection)	32,895	34,296	35,428	37,537	41,985
Municipalities' payments	2,018	2,190	2,182	2,136	2,047
Commonwealth Roads Acts	41,425	45,300	49,785	55,274	(*a*)78,977
Roads (Special Projects) Fund	7,761	6,721	5,675	7,643	30,429
Road charges, Commercial Goods Vehicles Act	8,903	9,136	9,745	10,359	10,038
Loans from State Government	388	400	400	300	300
Grants from State Government	783	983	1,333	568	772
Other	543	713	703	860	1,247
Total	**94,715**	**99,739**	**105,251**	**114,677**	**165,795**

(*a*) Includes $3,134,000 employment grants.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS—*continued*
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways	20,465	22,113	18,044	18,974	26,445
Main roads	19,373	20,372	20,660	20,142	26,499
Freeways	18,869	18,345	23,857	30,391	49,352
Tourist roads	2,665	2,284	1,749	1,860	2,134
Forest roads	902	858	840	910	1,102
Unclassified roads	17,217	16,846	17,513	19,242	28,334
Other	69	120	130	177	124
Plant purchase	1,956	2,060	1,765	1,116	1,783
Buildings, workshops, etc.	599	331	641	565	806
Interest, debt redemption, etc.	2,504	2,584	2,612	2,619	2,688
Statutory payment to—					
Tourist Fund	617	658	686	709	751
Traffic Authority Fund	309	329	343	354	375
Transport Regulation Board	513	534	548	585	622
Administration and other	9,780	12,250	14,099	18,099	24,954
Total	**95,838**	**99,685**	**103,487**	**115,742**	**165,969**

The Melbourne and Metropolitan Board of Works was responsible, up to 30 June 1974, for carrying out planning scheme proposals relating to metropolitan highways and bridges. However, as indicated above, from 1 July 1974 the Board's road-making powers, road assets, etc., were transferred to the Country Roads Board. Up to that time, the Board of Works had completed the South Eastern Freeway to Tooronga, the Tullamarine Freeway to serve Melbourne Airport, and other important projects. Total expenditure by the Board on road projects up to 30 June 1974 was $112.0 m of which $27.5 m was financed from the proceeds of the Board's Metropolitan Improvement Rate, $60.0 m was contributed by the Treasurer of Victoria from the Roads (Special Projects) Fund, and $24.5 m from the Commonwealth Aid Roads Funds.

The West Gate Bridge Authority (originally called the Lower Yarra Crossing Authority—the name of the Authority was changed on 24 September 1974) was incorporated in October 1965 as a company limited by guarantee and given powers under the *Lower Yarra Crossing Authority Act* 1965 to construct, operate and maintain a toll crossing over the lower reaches of the River Yarra.

Queensland

The Department of Main Roads was constituted in February 1951 with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main developmental, and secondary roads; and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc., under the Transport Acts, grants from the Commonwealth Government (*see* page 632) and loans, grants and advances from the State Government. The total receipts and payments during each of the years 1970–71 to 1974–75 are shown in the following table.

DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Motor vehicle registration, Transport Acts collections, fees, etc.	25,000	26,886	29,303	31,802	33,650
Loans from State Government	50	500	1,750	1,400	5,800
Grants from State Government	378	183	313	200	1,422
Roads (Contribution to Maintenance) Act	4,689	4,862	3,527	3,621	3,366
Commonwealth (Roads Grants)	47,285	55,298	58,444	68,018	80,139
Maintenance repayments—local authorities	1,116	1,137	1,302	1,271	876
Hire, rent, sales of plant, etc.	6,074	6,517	7,413	8,012	9,761
Other	773	750	961	1,686	1,541
Total	**85,366**	**96,132**	**103,013**	**116,010**	**136,554**
PAYMENTS					
Permanent road works and surveys(*a*)	56,802	62,942	69,557	73,603	91,521
Maintenance of roads	10,911	13,189	13,574	18,608	25,554
Plant, machinery, buildings, etc. (including plant maintenance)	3,348	4,797	5,130	5,483	6,212
Loans—					
Interest	59	−108	−216	−241	−126
Redemption	895	847	798	765	743
Administration and other	12,870	14,947	17,617	21,846	23,824
Total	**84,883**	**96,614**	**106,459**	**120,065**	**147,729**

(*a*) Includes grants to local authorities for road purposes.

South Australia

The Highways Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Transport, to undertake the construction, maintenance and protection of the principal roads of the State, allocate grants to Councils for roadworks and supervise the expenditure of these grants, and assist the Councils to purchase road-making plant and to defray the cost of road-works. In addition, the Commissioner advises Councils on technical questions concerning the construction, maintenance or repair of roads. Funds of the Department are derived mainly from the Highways Fund, into which are paid the proceeds from motor vehicle registration and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils, and contributions by the Bus and Tram Division of the State Transport Authority and from grants from the Commonwealth Government (*see* page 632).

The following table shows particulars of receipts and payments, during the years 1970–71 to 1974–75, of funds controlled by the Highways Department.

HIGHWAYS DEPARTMENT, SOUTH AUSTRALIA: RECEIPTS AND PAYMENTS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Motor vehicle registration, licences, fees	14,212	18,000	18,828	19,872	25,840
Commonwealth Roads Grants Acts	23,500	25,500	28,000	31,000	31,769
Other(*a*)	4,022	4,088	5,157	6,571	4,871
Total	**41,733**	**47,589**	**51,985**	**57,443**	**62,481**
PAYMENTS					
Construction and reconstruction of roads and bridges(*b*)	27,356	32,049	33,604	35,210	54,144
Maintenance(*a*)(*b*)	11,575	13,303	11,197	11,483	
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange	556	580	619	653	675
Advances to local and semi-government authorities	251	305	262	4	42
Stores, plant, machinery, suspense accounts, etc.(*c*)	859	3,816	3,967	4,808	4,651
General Administration	..	..	2,638	3,191	3,908
Total	**40,598**	**50,053**	**52,287**	**55,348**	**63,420**

(*a*) Includes reimbursement works for Commonwealth Government. (*b*) Includes administration expenses. (*c*) Represents gross repayments less recoveries by charges to works on account of depreciation and materials used.

Western Australia

Work connected with road construction and maintenance and associated projects in Western Australia is undertaken by the State Government, through the Main Roads Department, and by local government authorities throughout the State. The Department operates under the *Main Roads Act* 1930–1975 and is administered by a Commissioner of Main Roads who is responsible to the Minister for Transport. The Act makes provision for the construction and maintenance of public roads in the categories of highways, main and secondary roads, other roads, and the control of access to roads. Within its own district each local government authority is responsible for the provision and upkeep of roads other than those provided by the Main Roads Department. In addition, the local authorities are required by the *Main Roads Amendment Act* 1975 to maintain secondary roads within or along their boundaries.

Revenue for road works in Western Australia is derived principally from allocations made under Commonwealth roads grants (*see* page 632). Other sources of income for road works are all motor vehicle licence fees (other than recording fees), excess load permit fees and one half of drivers' licences which are paid to the Main Roads Trust Account under authority to the *Road Traffic Act* 1974–75. Further moneys for expenditure on road maintenance are available under the *Road Maintenance* (*Contribution*) *Act* 1965–72, the *Transport Commission Act* 1966–75 and from payments by local government authorities in respect of permanent works and the maintenance of highways, main and secondary roads.

Receipts and payments for the years 1970–71 to 1974–75 are shown in the following table.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND PAYMENTS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Motor vehicle registration fees, etc.	13,463	14,245	14,567	15,321	23,987
Commonwealth Government Grants—					
Commonwealth Roads Grants	36,270	39,250	43,910	48,030	50,195
States Grants (Beef Cattle Roads) Act	1,000	1,600	1,900	981	..
Other Grants	..	..	..	255	205
Road Maintenance (Contribution) Act	3,990	3,822	3,359	3,682	4,178
Recoups from other Government Departments and Local Authorities for works carried out	2,417	2,295	2,672	2,788	4,044
Other	233	434	461	477	487
Total	**57,374**	**61,646**	**66,870**	**71,534**	**83,096**
PAYMENTS					
Road construction and maintenance	36,828	44,887	47,111	45,675	54,726
Other road works—signals, traffic engineering, etc.	854	784	777	1,075	2,067
Statutory grants to Local Authorities	11,716	12,435	13,295	13,962	15,044
Administration, supervision, etc.	6,312	7,231	8,296	9,893	12,050
Other	1,968	328	410	304	324
Total	**57,678**	**65,665**	**69,889**	**70,910**	**84,211**

Tasmania

Under the *Roads and Jetties Act* 1935, the control of the construction and maintenance of roads and certain road-making plant was vested in the Minister for Lands and Works. Works authorised by the Minister in respect of roads classified as State highways, main roads, secondary roads and tourist and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund, into which are paid the grants from the Commonwealth Government (*see* page 632), motor vehicle taxes and public vehicle fees. Loan funds are also authorised by Parliament for road purposes. Municipal councils contribute towards the cost of maintaining main and secondary roads in the classified system. The maintenance of roads not included in the classified system is the responsibility of municipal councils, but they are assisted with grants made available under the *Roads Grants Act*.

The following table gives a detailed analysis only of funds available to the State government and expenditure from the State Road Funds for the years 1970–71 to 1974–75.

STATE ROAD FUNDS; TASMANIA: RECEIPTS AND PAYMENTS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Motor vehicle taxation, registration, licences, fees, fines, etc.	5,033	5,659	5,912	6,338	6,660
Commonwealth Roads Grants	10,230	10,820	12,150	13,950	18,620
State Loan Fund	1,020	930	540	710	936
Contributions by Local Authorities	17	17	19	17	18
Other	93	307	277	441	429
Total	**16,393**	**17,733**	**18,897**	**21,456**	**26,662**
PAYMENTS					
Construction and reconstruction of roads and bridges	12,320	12,960	13,810	15,757	18,936
Maintenance of roads and bridges	4,297	4,475	4,686	4,978	6,494
Planning and research	185	189	186	220	363
Total	**16,802**	**17,624**	**18,682**	**20,955**	**25,793**

Water supply, sewerage and drainage

The information in this section relates primarily to the metropolitan areas and provincial cities and towns. For information on water supply and irrigation in rural areas *see* Chapter 23, Water Resources.

New South Wales

The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government, and five members elected by local councils. These are (*a*) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e. in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, Shellharbour and Kiama, and (*b*) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill and Cobar similar boards include representatives of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

Metropolitan and Hunter District water supply. The storage reservoirs of the *metropolitan water supply system* with a combined available capacity of 2,623,275 megalitres, drain catchment areas of 16,650 square kilometres (including Warragamba, 9,000 square kilometres, Shoalhaven, 5,620 square kilometres, Upper Nepean, 900 square kilometres and Woronora, 85 square kilometres). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October 1960. This dam, constructed in concrete, has a storage capacity of 2,057,000 megalitres. Its safe net draught is estimated to be 1,246 megalitres a day. At 30 June 1975 there were 201 service reservoirs in use with a combined capacity of 4,247 megalitres. Fluoridation of the metropolitan water supply commenced in April 1968.

The following table shows, for the Metropolitan system, the number of properties, the estimated population supplied, and other details.

METROPOLITAN WATER SUPPLY(*a*), NEW SOUTH WALES: SERVICES

Year	Improved properties for which water mains available	Estimated population supplied	Average daily consumption	Total consumption for the year	Average daily consumption		Length of mains	Number of meters
					Per property	Per head of estimated population		
		'000	megalitres	megalitres	litres	litres	kilometres	
1970–71 .	817,655	3,042	1,332	485,795	1,628	441	14,441	608,851
1971–72 .	839,984	3,040	1,341	490,241	1,596	441	14,798	634,211
1972–73 .	862,353	3,063	1,418	518,100	1,646	464	15,163	655,156
1973–74 .	880,543	3,089	1,380	504,575	1,570	448	15,461	669,381
1974–75 .	906,646	3,132	1,494	545,180	1,647	477	15,714	699,259

(*a*) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

The water supply of the *Hunter District system* is drawn principally from three sources; the Chichester Reservoir, with a storage capacity of about 17,000 megalitres and draining a catchment of 197 square kilometres, the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens, and the Grahamstown Water Supply Scheme which is still being developed. Another source of supply is provided by the Nelson Bay-Anna Bay Scheme. Service reservoirs and tanks distributed throughout the water supply district have a total storage capacity of 636 megalitres.

Metropolitan and Hunter District sewerage and drainage system. The *metropolitan sewerage and drainage system* serving the Sydney Statistical Division comprises 4 major sewerage systems and 12 minor systems, consisting of 6 outfalls discharging directly into the Pacific Ocean and 12 treatment works. There are also 3 centres outside the Sydney Statistical Division (Bellambi, Port Kembla and Wollongong) which discharge directly into the Pacific Ocean. Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1975 were 314 kilometres long.

The following table gives details of sewerage services and stormwater drains of the Metropolitan system.

METROPOLITAN SEWERAGE AND DRAINAGE(*a*) NEW SOUTH WALES: SERVICES

30 June	Improved properties for which sewerage available	Estimated population served	Length of sewers	Length of stormwater channels
		'000	Kilometres	Kilometres
1971 . . .	659,035	2,477	11,441	307
1972 . . .	696,342	2,531	11,965	309
1973 . . .	725.838	2,600	12,511	312
1974 . . .	753,752	2,662	13,018	313
1975 . . .	790,286	2,747	13,492	314

(*a*) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

The main sewerage system of the *Hunter District* serves the City of Newcastle and discharges into the Pacific Ocean at Burwood Beach. There are also local treatment works at Maitland, Cessnock and some of the outlying districts.

Metropolitan system finances. The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board for each of the services of water supply, sewerage and drainage during 1974–75, and for the three services combined for the years 1970–71 to 1974–75.

METROPOLITAN(*a*) WATER SEWERAGE AND DRAINAGE BOARD, NEW SOUTH WALES: FINANCES
($'000)

			Expenditure				
Year	*Capital debt at 30 June*	*Revenue*	*Working expenses (b)*	*Interest and exchange*	*Debt redemption*	*Total*	*Surplus*
1974–75—							
Water . . .	433,662	77,416	44,965	23,625	8,818	77,408	8
Sewerage . . .	543,188	78,802	37,269	30,908	10,618	78,795	7
Drainage . . .	15,511	4,401	3,378	813	203	4,394	8
Total—							
1974–75 . .	**992,361**	**160,620**	**85,613**	**55,346**	**19,638**	**160,597**	**23**
1973–74 . .	855,741	151,027	86,940	46,588	17,477	151,005	22
1972–73 . .	769,930	136,592	78,538	42,522	15,524	136,584	10
1971–72 . .	715,978	119,851	68,083	37,736	14,017	119,836	14
1970–71 . .	654,420	97,694	52,289	33,259	12,135	97,683	11

(*a*) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires. (*b*) Includes provision for renewals, long service leave, etc.

Local government country water supply and sewerage systems. At 31 December 1974, country water supply services were conducted or under construction by 45 municipalities, 98 shires and 6 county councils, and country sewerage services by 51 municipalities and 83 shires. The capital indebtedness of these schemes was $194,588,000 at 31 December 1974. Debt of the municipalities and shires amounted to $175,838,000 and county councils to $18,750,000. Government advances amounting to $825,000 are included in these figures. Aggregate income and expenditure amounted to $49,700,000 and $34,714,000, respectively, in 1974.

Other country water supply and sewerage systems. The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31 December 1974 was $4,084,000. In 1974, income (excluding subsidies, State Government $297,000 and mining companies $910,000) amounted to $864,000 and expenditure (excluding debt redemption of $350,000) amounted to $1,795,000. The Cobar Water Board was constituted in February 1964. At 31 December 1974 its capital indebtedness was $2,021,000. The following country water supply systems—South-West Tablelands, Junee, and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Electricity Commission of New South Wales, and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was $15,061,000 at 31 December 1974. The Mulwala Water Supply and Sewerage Service was constructed as an urgent war-time work for the Commonwealth Government, and the Bethungra Water Supply System is administered by the Department of Public Works in conjunction with the Junee supply.

Victoria

Melbourne and Metropolitan Board of Works. The Board consists of a Chairman, Deputy Chairman, and 53 Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The principal functions of the Board are: to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage system; to deal with main drains and main drainage works; to control and manage the rivers, creeks and watercourses within the metropolitan area; and to carry out the functions of a permanent planning authority.

Metropolitan water supply. There are 7 storage reservoirs serving the metropolitan area. These have an effective capacity (in megalitres) of approximately: Yan Yean, 30,000; Maroondah, 22,000; O'Shannassy, 4,000; Silvan, 40,000; Upper Yarra, 200,000; Greenvale, 27,000 and Cardinia, 287,000; total 610,000. Service reservoirs number 67, with a total capacity of approximately 1,840 megalitres. The following table shows particulars of Melbourne metropolitan water supply services for the years 1970–71 to 1974–75.

MELBOURNE WATER SUPPLY: SERVICES

Year	Number of improved properties supplied	Estimated population supplied	Total consumption for the year	Average daily consumption			Length of acquaducts, etc., mains and reticulation	Number of meters
				Total	Per improved property	Per head of estimated population		
		'000	megalitres	megalitres	litres	litres	kilometres	
1970–71	696,018	2,318	332,506	911	1,309	386.2	11,808	630,020
1971–72	722,016	2,363	331,465	906	1,254	370.1	12,012	644,904
1972–73	748,990	2,415	315,208	864	1,153	(*a*)342.7	12,268	663,994
1973–74	787,052	2,445	361,858	991	1,260	405.5	12,434	678,361
1974–75	809,372	2,475	355,625	974	1,204	393.7	12,724	688,753

(*a*) Restrictions on use of water imposed due to drought conditions.

Metropolitan sewerage and drainage. Particulars of sewerage and drainage services for 1970–71 to 1974–75 are shown below.

MELBOURNE SEWERAGE AND DRAINAGE: SERVICES

Year	Number of improved properties for which sewers are provided	Estimated population for which sewers are provided	Total sewage discharge for the year	Average daily discharge			Length of sewers, etc.	Length of mains' drains
				Total	Per improved property	Per head of estimated population		
		'000	megalitres	megalitres	litres	litres	kilometres	kilometres
1970–71	559,000	1,827	185,003	507	907	277	8,390	418
1971–72	575,221	1,885	192,750	526	915	279	8,501	426
1972–73	591,673	1,939	202,792	556	940	287	8,731	438
1973–74	621,161	2,036	219,144	600	967	295	8,920	447
1974–75	640,165	2,068	223,879	613	958	297	9,331	454

The metropolitan sewerage system consists of a major system (served by Brooklyn Pumping Station and the Werribee Board of Works Farm) serving an area of 52,500 hectares and the following seven subsidy systems—Braeside (2,800 hectares), Kew (46 hectares), Maribyrnong (74 hectares), Lower Plenty (900 hectares), Heatherton (850 hectares), Altona (180 hectares) and Chelsea (300 hectares).

In addition, regional purification facilities have been established in the Dandenong Valley at Nunawading, Waverley and Knox (Stud Road and Ferny Creek) to provide service to developing areas of the Dandenong Valley until such time as a major trunk sewer and a new South-Eastern purification complex are established.

The Board of Works Farm is situated about 39 kilometres south-west of Melbourne near Werribee. It is 10,850 hectares in area and purifies approximately 96 per cent of the metropolitan sewerage flow before discharging it into Port Phillip Bay.

Completion of the South-Eastern Sewerage System will allow diversion of flows on the eastern side of the metropolis away from the Farm, and also allow service of areas to the north-east, east and south-east of the metropolis, which cannot be served by the Board of Works Farm. Purified effluent from the South-Eastern Purification Plant, under construction at Carrum, south of Melbourne, will flow to Cape Schanck more than 50 kilometres further south.

Melbourne and Metropolitan Board of Works' finances. The following table provides for the year 1974–75 a summary of the financial operations of the water supply, sewerage and drainage services conducted by the Melbourne and Metropolitan Board of Works, and of the combined services for the years 1970–71 to 1974–75. The financial operations of the Board as the Authority responsible for metropolitan highways and bridges are referred to on page 635.

MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES
($'000)

			Expenditure					
Service, etc.	*Capital cost of works and buildings at 30 June(a)*	*Revenue*	*Working expenses*	*Works*	*Interest and exchange*	*Debt redemption*	*Total*	*Surplus (+) or deficit (−)*
Water	375,356	44,960	17,925	1,400	19,926	..	39,251	+ 5,709
Sewerage	541,686	62,180	23,179	2,600	29,378	..	55,158	+ 7,022
Drainage	57,104	8,381	3,787	1,000	2,404	..	7,191	+ 1,190
General(*b*)	42,211	..	5,900	..	..	7,164	13,064	−13,064
Total 1974–75	**1,016,356**	**115,521**	**50,791**	**5,000**	**51,708**	**7,164**	**114,663**	**+ 858**
1973–74	871,984	89,878	36,199	5,000	42,027	6,148	89,373	+ 505
1972–73	755,732	74,340	28,376	5,000	36,978	5,499	75,853	−1,513
1971–72	646,054	67,757	26,047	5,000	30,700	4,517	66,264	+1,493
1970–71	562,980	57,364	22,542	3,550	26,700	3,854	56,645	+ 719

(*a*) Total loan indebtedness—1974–75, $866,683,000. (*b*) Statutory and general expenditure not distributed over services.

State Rivers and Water Supply Commission. Water supply and conservation throughout Victoria, (except for the area controlled by the Melbourne and Metropolitan Board of Works) is under the jurisdiction of the State Rivers and Water Supply Commission. The events leading to the establishment of the Commission, and its various works are described in the chapter, Water Resources.

Queensland

The *Brisbane City Council* operates the water supply and sewerage systems of the City of Brisbane and also supplies, in bulk, the whole of the water used by the City of Ipswich and a portion of that used by the City of Redcliffe, Albert Shire Council, Beaudesert Shire Council and Moreton Shire Council. Redcliffe supplements its supply from that of the Pine Rivers Shire Council, while Albert and Moreton also draw on their own reservoirs. The total number of service reservoirs for Brisbane Water Supply is 32 with a capacity of 531 megalitres. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 910,000 megalitres, 370,000 megalitres to be for water storage and 540,000 megalitres for flood mitigation. The following table is a summary of operations of the water supply system of the City of Brisbane for the years 1970–71 to 1974–75.

CITY OF BRISBANE WATER SUPPLY: SERVICES

					Average daily consumption		
Year	*Services connected*	*Estimated population supplied*	*Average daily consumption*	*Total consumption for the year*	*Per service*	*Per head of estimated population*	*Length of trunk and reticulation mains*
			megalitres	megalitres	litres	litres	kilometres
1970–71	193,917	705,858	353.2	128,902	1,823	500	3,754
1971–72	197,918	704,588	380.5	139,299	1,923	541	3,829
1972–73	201,040	715,702	415.5	151,736	2,068	582	3,930
1973–74	206,438	720,468	400.0	145,985	1,937	557	4,015
1974–75	208,454	731,648	451.9	164,939	2,168	649	4,075

The sewerage treatment works of the *Brisbane sewerage scheme* is situated at Luggage Point at the entrance to the Brisbane River. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1970–71 to 1974–75.

BRISBANE SEWERAGE: SERVICES

Year	*Premises connected*	*Estimated population served*	*Total sewage pumped for the year*	*Length of main, branch, reticulation, etc., sewers*
			megalitres	kilometres
1970–71 . .	152,803	565,371	42,429	3,658
1971–72 . .	167,585	596,603	40,642	4,033
1972–73 . .	182,184	648,575	41,397	4,369
1973–74 . .	192,858	673,074	53,372	4,672
1974–75 . .	202,347	706,191	48,739	4,820

Brisbane City Council water supply and sewerage systems—finances. The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1970–71 to 1974–75.

BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES
($'000)

Service and year	*Gross capital cost to 30 June*	*Revenue*	*Expenditure*			*Surplus (+) or deficit (—)*
			Working expenses	*Interest, redemption etc., charges*	*Total(a)*	
Water supply—						
1970–71 . . .	85,157	11,769	4,687	3,432	11,816	— 47
1971–72 . . .	95,135	13,604	5,436	4,052	10,748	+ 2,856
1972–73 . . .	n.a.	14,539	5,857	4,445	14,182	+ 357
1973–74 . . .	n.a.	16,377	7,036	5,683	15,110	+ 1,266
1974–75 . . .	n.a.	19,089	9,442	6,590	19,667	— 578
Sewerage—						
1970–71 . . .	77,802	10,524	1,961	3,277	9,261	+ 1,263
1971–72 . . .	77,876	11,171	2,531	3,620	6,979	+ 4,192
1972–73 . . .	n.a.	13,346	2,851	4,108	13,052	+ 294
1973–74 . . .	n.a.	14,172	3,679	4,225	10,352	+ 3,820
1974–75 . . .	n.a.	15,817	4,430	4,525	12,397	+ 3,420

(*a*) Total, including other expenditure.

Other areas. At 30 June 1974, of the 130 local authorities in addition to the City of Brisbane, 127 had water supply schemes and 89 operated sewerage systems. The receipts (other than loan and loan subsidy) of water undertakings controlled by these authorities amounted to $20,365,000 in 1973–74. Expenditure amounted to $20,361,000, included $7,342,000 for debt charges. In addition, expenditure from loans and loan subsidy amounted to $14,444,000. Finances of sewerage undertakings are incorporated with cleansing and sanitary services and are not available separately.

South Australia

The water supply and sewerage systems in this State were constructed mainly, and are maintained by the Engineering and Water Supply Department, under the control of the Minister of Works. Works controlled by the Department are the Adelaide, Barossa, Beetaloo, Bundaleer, Moorook, Tod River, Warren, Yorke Peninsula, and other country water districts systems, the Morgan-Whyalla water supply system, the metropolitan and country sewerage systems, the Metropolitan Flood Waters Scheme, and works on the River Murray constructed under the River Murray Waters Agreement. Several water supply schemes on the Murray River are administered by the Department of Lands in conjunction with irrigation works, and supplies to Woomera and Leigh Creek coalfield are controlled by the operating authorities.

Adelaide waterworks. At 30 June 1974 the Adelaide waterworks supplied districts covering 740 square kilometres of the metropolis and extending to near country areas. The capacity of the principal reservoirs was 189,000 megalitres and there were 6,651 kilometres of metropolitan mains. The Mannum–Adelaide pipeline conveys water from the River Murray. Water is delivered to a terminal storage near Adelaide and thence to the metropolitan distribution system or alternatively it can be delivered into metropolitan reservoirs on the River Torrens. The pipeline also supplies various country areas along and extending from its route. A second River Murray pipeline extending from Murray Bridge to the River Onkaparinga is also used to supplement storage.

ADELAIDE WATERWORKS: FINANCES
($'000)

Year	Invested capital at 30 June (a)	Revenue	Expenditure			Surplus(+) or deficit(−)
			Working expenses (b)	Interest	Total	
1970–71 . . .	133,509	14,513	6,787	5,887	12,674	+ 1,839
1971–72 . . .	143,880	15,772	7,130	6,414	13,544	+ 2,229
1972–73 . . .	145,156	18,417	8,606	6,750	15,356	+ 3,061
1973–74 . . .	153,239	20.699	10,120	7,543	17,664	+ 3,035
1974–75 . . .	159,853	22,332	13,117	8,996	22,114	+ 218

(*a*) After deduction of depreciation. (*b*) Includes debt redemption.

Adelaide metropolitan sewerage system. The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide, Christies Beach, and Salisbury–Elizabeth areas of 642 square kilometres in all, includes treatment works at Glenelg, Port Adelaide, Bolivar, and Christies Beach. Financial and other particulars for 1970–71 to 1974–75 are shown hereunder.

ADELAIDE METROPOLITAN SEWERAGE: SUMMARY

Year	Length of sewers	Number of connections	Invested capital at 30 June(a)	Revenue	Expenditure			Surplus
					Working expenses (b)	Interest	Total	
	km		$'000	$'000	$'000	$'000	$'000	$'000
1970–71 .	3,779	254,816	90,169	10,477	4,270	3,910	8,180	2,297
1971–72 .	3,888	265,755	96.431	11,977	4,909	4,500	9.409	2.568
1972–73 .	4,060	276,652	92,642	12,964	5,400	4,946	10,346	2,618
1973–74 .	4,193	288,166	96,467	14,325	6,950	5,328	12,278	2,047
1974–75 .	4,400	297,300	101,020	16,137	9,751	5,963	15,714	423

(*a*) After deduction of depreciation. (*b*) Includes debt redemption.

Country sewerage schemes. Sewerage schemes are operating at Port Lincoln, Naracoorte, Mount Gambier, Millicent, Lobethal, Gumeracha, Myponga, Mannum, Stirling, Whyalla, Angaston and Murray Bridge. At Port Lincoln and Mount Gambier the sewers discharge to ocean outfalls and treatment works are used on the other systems. There are 604 kilometres of sewers and 23,871 connections in the country systems. Sewerage schemes for Port Pirie, Victor Harbor and Gawler are under construction and operating in part.

Country water supply. Water districts systems at 30 June 1974 comprised an area of 6,830,000 hectares. Supply came from reservoirs having a capacity of 36,000 megalitres, from minor reservoirs, from the River Murray, and from underground sources. Apart from local supplies, water from the River Murray is distributed over wide areas through Mannum–Adelaide, Morgan–Whyalla, Swan Reach–Stockwell and Tailem Bend–Keith pipelines and branches of these pipelines. The principal areas of underground supplies are in the south-east of the State, where water from the Murray basin can be had at moderate depths or from lakes, and from sand beds on Eyre Peninsula. In the year 1973–74 supplies made to Mount Gambier, Naracoorte and other towns in the south-east amounted to 8,411 megalitres, and the Uley–Wanilla, Lincoln and Polda Basins contributed 4,445 megalitres to the Tod River Water District.

Morgan–Whyalla water supply scheme. This scheme, which has 359 kilometres of main via Port Augusta and 283 kilometres of main via the Spencer Gulf undersea crossing, was officially opened on 31 March 1944, the capital invested to 30 June 1975 being $31,386,000. Apart from supplying Whyalla, the mains have been used to allow expansion of reservoir supplies in the northern agricultural area of the State, and to meet new demands caused by industrial growth at Whyalla, Port Pirie and Port Augusta. During 1973–74 water used from the scheme amounted to 21,000 megalitres.

Western Australia

The principal water supply systems of Western Australia are under the control of two State authorities, the Metropolitan Water Supply, Sewerage and Drainage Board and the Public Works Department. The area which constitutes the territory administered by the Board encompasses approximately 4,144 square kilometres and extends from Perth southward to Rockingham and Serpentine, northward to Wanneroo, and eastward to Sawyers Valley and Kalamunda. The Public Works Department controls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as 125 local water supplies (*see also* Chapter 23, Water Resources). Four independent town schemes are controlled by local Water Boards in country areas, and individual water supplies serve railways, timber mill towns, isolated mines, pastoral properties, stock routes, and agricultural areas, mainly from dams, tanks, wells and bores.

Metropolitan water supply, sewerage and drainage. The main sources of the metropolitan water supply are several reservoirs on the Darling Escarpment, the total capacity of these being 493,397 megalitres. The largest of these are the South Dandalup Reservoir, the Serpentine Reservoir and the Canning Reservoir which have capacities of 208,210 megalitres, 184,882 megalitres and 93,400 megalitres respectively. Water from storage on the Darling Escarpment is conveyed to service reservoirs with a combined capacity of 1,675 megalitres which serve the territory administered by the Board. Underground water is used to augment hills supplies. The amount used during 1974–75 was 21,157 megalitres, which was 11.7 per cent of the total consumption from all sources.

The following table shows particulars of the *metropolitan water supply services* for 1970–71 to 1974–75.

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES

Year	*Number of services (a)*	*Average daily consumption*	*Total consumption for year*	*Average daily consumption per service (b)*	*Length of mains*	*Number of meters*
		megalitres	megalitres	litres	kilometres	
1970–71 . .	200,597	405.5	148,080	2,055	5,641	178,857
1971–72 . .	210,465	424.6	155,017	2,068	5,934	187,313
1972–73 . .	223,393	429.5	156,757	1,922	6,171	196,220
1973–74 . .	231,938	472.3	172,394	2,036	6,250	206,527
1974–75 . .	239,426	496.5	181,228	2,074	6,464	215,555

(*a*) Figures relate to 30 June. (*b*) Calculated from averages for the year.

Some particulars of the *metropolitan sewerage and main drainage services* for 1970–71 to 1974–75 are shown in the following table.

METROPOLITAN SEWERAGE AND MAIN DRAINAGE WESTERN AUSTRALIA: SERVICES

Year	*Services*	*Length of sewers*	*Length of main drains*
		kilometres	kilometres
1970–71	81,940	1,828	253
1971–72	87,318	1,991	253
1972–73	93,402	2,158	260
1973–74	99,698	2,432	277
1974–75	111,300	2,635	283

Metropolitan Water Supply, Sewerage and Drainage Board—finances. The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Board.

METROPOLITAN WATER SUPPLY, SEWERAGE AND DRAINAGE BOARD WESTERN AUSTRALIA: FINANCES
($'000)

Service and year	*Capital cost to 30 June*	*Revenue*	*Expenditure*			*Surplus (+) or Deficit (−)*
			Working expenses	*Depreciation and other charges*	*Total*	
Water supply—						
1970–71 . . .	92,284	8,371	3,389	4,460	7,850	+ 521
1971–72 . . .	101.509	10,956	3,953	4,931	8,884	+2,073
1972–73 . . .	114,971	11,482	4,712	5,581	10,293	+1,189
1973–74 . . .	131,062	11,943	6,137	6,489	12,627	− 683
1974–75 . . .	148,932	17,238	8,402	8,099	16,500	+ 738
Sewerage—						
1970–71 . . .	48,500	4,508	2,255	2,214	4,470	+ 38
1971–72 . . .	58,975	6,097	2,693	2,573	5,267	+ 831
1972–73 . . .	76,506	6,586	3,258	3,117	6,375	+ 211
1973–74 . . .	96,363	7,153	4,854	3,924	8,777	−1,624
1974–75 . . .	127,091	10,561	6,575	6,011	12,585	−2,024
Main drainage—						
1970–71 . . .	10,699	1,144	448	467	915	+228
1971–72 . . .	11,259	1,357	492	503	995	+362
1972–73 . . .	11,694	1,444	598	541	1,139	+306
1973–74 . . .	12,356	1,520	787	605	1,392	+128
1974–75 . . .	13,517	1,737	1,025	716	1,741	−4

Country water supplies. Information relating to country water supplies is included in Chapter 23, Water Resources.

Tasmania

Waterworks. In Tasmania, water supply was once the exclusive responsibility of the city and municipal councils. Two statutory authorities now operate bulk supply schemes, piping water for distribution by local government authorities in the Hobart and Launceston areas, and directly to certain industrial consumers.

The over-all control of water supply in the greater Hobart area, comprising the municipalities of Hobart, Clarence, Glenorchy, and Kingsborough, is vested in the Metropolitan Water Board, but the municipalities retain primary responsibility for reticulation. The Board maintains pumping stations at Bryn Estyn and Lawitta on the Derwent River near New Norfolk to supplement four water catchment and storage areas near Hobart. Total maximum capacity of the system at 30 June 1975 was 209 megalitres per day. The following table shows particulars of the finances of the Metropolitan Water Board.

METROPOLITAN WATER BOARD—TASMANIA: FINANCES
($'000)

Year	*Capital expenditure to 30 June*	*Revenue*	*Expenditure*			*Surplus (+) or deficit (−)*
			Working expenses	*Interest and depreciation*	*Total*	
1970–71 . . .	13,119	2,599	1,189	1,301	2,490	+109
1971–72 . . .	13,714	2,620	1,378	1,484	2,862	−242
1972–73 . . .	13,908	3,035	1,616	1,600	3,216	−181
1973–74 . . .	14,255	3,550	1,665	1,669	3,334	+216
1974–75 . . .	14,801	3,921	2,096	1,863	3,960	−39

The other statutory authority, the Rivers and Water Supply Commission, operates two schemes in the Launceston region. The North Esk Regional Water Supply Scheme supplies water to the municipalities of St Leonards, George Town, Lilydale and part of Westbury, and also supplies water directly to some industrial users situated near the Tamar River. The second scheme in this region, the West Tamar Water Supply, provides water to the Municipality of Beaconsfield. In addition to the above schemes, the Rivers and Water Supply Commission also operates an industrial water supply scheme on the east coast of Tasmania near Triabunna.

At 30 June 1975 water was supplied to approximately 110,540 properties throughout the State.

Sewerage. At 30 June 1975 the number of tenements connected to sewerage services was about 93,044. Approximately 65 per cent of sewerage discharge is subject to treatment.

Northern Territory

Information relating to water supply in the Northern Territory may be found in Chapter 23, Water Resources.

Australian Capital Territory

Information relating to water supply and sewerage in the Australian Capital Territory may be found in Chapter 30, Territories of Australia.

Harbour boards and trusts

The number and net tonnage of vessels which entered the major ports in each State during the years 1973–74 and 1974–75 are shown in Chapter 12, Transport and Communication (*see* page 375). Particulars of overseas and interstate cargo discharged and shipped are shown on pages 375–9 of the same chapter.

New South Wales

The Maritime Services Board of New South Wales exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State. At the ports of Sydney, Newcastle and Botany Bay the Board is also responsible for the provision of adequate wharfage and channels and carries out all construction, maintenance and dredging work. Since 1 February 1936 the State enactments on port charges, including the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act and the Sydney Harbour Trust Act, have been administered by the Maritime Services Board.

The activities of the Maritime Services Board are financed through the Consolidated Revenue Fund and the Maritime Services Fund. Revenue and expenditure in connection with pilotage and navigation services and the administration and collection of fees at Port Kembla and the other smaller ports form part of the Consolidated Revenue Fund of the State Government (revenue and expenditure for the year 1974–75 was $12,137,000 and $5,438,000 respectively). The Maritime Services Fund is credited with all revenue earned at the Ports of Sydney, Newcastle, and Botany Bay with the exception of that derived from pilotage and navigation services. All expenditure on the administration and maintenance of these ports is met by this Fund.

Financial details relating to the Maritime Services Fund are shown in the following table.

MARITIME SERVICES BOARD FUND: FINANCES OF THE PORTS OF SYDNEY NEWCASTLE AND BOTANY BAY
($'000)

		Revenue		*Expenditure*			
Year	*Capital debt at 30 June*	*Wharfage and tonnage rates*	*Total*	*Working expenses (a)*	*Interest debt redemption exchange, etc.*	*Total*	*Surplus (+) or deficit (−)*
1970–71 . .	87,073	17,217	30,297	25,025	5,502	30,527	−229
1971–72 . .	93,620	19,406	30,371	23,857	6,459	30,316	+ 55
1972–73 . .	103,341	18,601	29,201	23,134	6,969	30,103	−902
1973–74 . .	110,423	24,225	40,591	32,403	7,755	40,158	+433
1974–75 . .	112,263	25,670	46,764	37,979	8,485	46,464	+301

(*a*) Includes provisions for renewals, long-service leave, etc.

Port of Sydney. The wharves are situated close to the business centre of the city, about 6 or 8 kilometres from the Heads. At 30 June 1975 there were 5 dolphin berths, 1,020 metres long, and 73 effective commercial cargo berths, with a total length of 11,811 metres, controlled by the Board. Accommodation for harbour craft amounts to 685 metres, while the length of other berths, including oil and private wharves, totals 3,599 metres. Depth of water at wharves is up to 13 metres. Special facilities for the storage and handling of products such as wheat, wool, coal, etc., are provided. Docking facilities are available for large vessels at the Captain Cook Graving Dock. Container facilities became available in March 1969 with the opening of the eastern section of the Balmain container terminals to cellular container vessels.

Port of Newcastle. Shipping at Newcastle is concerned primarily with the coal, iron and steel and other heavy industries located in the district. However, facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

Botany Bay. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney, and one jetty with a tanker berth each side of the jetty is available as well as three tanker offshore moorings with submarine pipelines.

Port Kembla is the port of the southern coalfields and for the major industrial areas in and about Wollongong.

Other ports. In addition to the ports of Sydney, Newcastle, Port Kembla, and Botany Bay, the Board controls 29 outports along the coastline of 1,900 kilometres. The shipping trade of these outports is relatively small.

Victoria

The *Port of Melbourne* comes under the control of the Melbourne Harbor Trust Commissioners, a financially independent statutory organisation, with a full-time chairman and five part-time commissioners.

The advanced methods of cargo handling which have developed with the advent of container, unit load, and roll-on roll-off vessels now entering the Port, have required, during the past 10 years, an expenditure in excess of $60 million on capital works, and the current capital value of the Port of Melbourne is more than $103 million. The Port covers an area of 27 square kilometres and provides 19 kilometres of berthage, with 92 commercial berths.

The main container complex, Swanson Dock, has four berths. Constructed at a cost of $20 million, and taking some 6 years to complete, this 36 hectares complex handled 5.3 million tonnes of containerised cargo in 1975.

Currently, the Port of Melbourne has seven roll-on roll-off berths. The Webb Dock area, the Port's busiest roll-on roll-off complex, was originally a ferry berth (constructed in 1959) with a 2 hectares back-up area and has now been developed into a three berth complex, with a back-up area of 8 hectares. During 1975 Webb Dock handled 1.7 million tonnes of cargo.

The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 9.4 to 12.2 metres.

The following table shows particulars of the financial operations of the Trust.

MELBOURNE HARBOR TRUST: FINANCES
($'000)

Year	Gross loan indebtedness at 31 December	Revenue		Expenditure				
		Wharfage and tonnage rates	Total	Operation, administration and maintenance	Interest, debt redemption, exchange, etc.	General reserve, depreciation, renewals and insurance account	Total	Surplus(+) or Deficit(−)
1971	44,059	10,038	16,263	9,719	3,152	3,158	16,029	+233
1972	45,644	9,398	15,478	10,569	2,506	2,867	15,942	−464
1973(*a*)	(*b*)	5,485	8,777	5,368	1,298	1,930	8,596	+181
1973–74	48,051	12,702	21,338	11,451	2,820	3,818	18,089	+3,249
1974–75	51,060	14,124	24,156	14,461	3,141	4,648	22,250	+1,906

(*a*) From January 1973 the Trust's accounting period has been changed from a calendar year to a fiscal year. (*b*) Gross loan indebtedness at 30 June 1973 was $46,201,000.

The *Port of Geelong* operated by the Geelong Harbor Trust, has available 17 effective berths, plus 2 berths at the Explosives Pier, Point Wilson, owned and operated by the Commonwealth Government. Two modern dry bulk berths (Lascelles Wharf Nos 1 and 2 berths) became fully operational in 1970 and a roll-on/roll-off berth at Corio Quay came into operation in January 1971.

Port of Portland. Development projects currently in hand will provide the port with facilities necessary to handle fully laden carriers up to 71,000 tonnes deadweight. In the first instance No. 1 berth and its approaches are being dredged from 11 metres to 12 metres low water and the bulk grain gallery extended to the outer limits of the K. S. Anderson wharf. Trade handled during 1974–75 amounted to 582,910 tonnes; operating revenue was $1,094,131.

Queensland

The ports of Queensland generally are administered by harbour boards with members representing the cities, towns and districts served by the ports. The ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton and Townsville are administered by Boards. Where no board is established, control is exercised by the Department of Harbours and Marine. The principal ports controlled by the Department are Brisbane, Hay Point, Lucinda, Maryborough, Mourilyan, Thursday Island and Weipa.

Brisbane, the busiest port in the State, is a river port of world standard dredged to a sufficient depth to accommodate most classes of vessels. The port, as well as providing wharves for containers, bulk grain fertiliser, freezer goods, petroleum products and general cargo, also provides shipbuilding and ship repair facilities including a dry dock accommodating vessels up to 71,000 tonnes deadweight. Two refineries, situated at the mouth of the river, can supply all ships' bunkering requirements.

The finances of Brisbane Harbour for the years 1970–71 to 1974–75 are shown in the following table.

BRISBANE HARBOUR: FINANCES
($'000)

Year	Loan indebtedness at 30 June	Receipts		Payments	
		Harbour dues	Total	Working expenses(a)	Total
1970–71 . .	5,576	2,685	3,788	3,556	4,004
1971–72 . .	6,352	3,001	4,349	3,308	3,789
1972–73 . .	6,653	3,010	5,586	3,700	4,228
1973–74 . .	6,866	3,265	6,451	4,308	4,862
1974–75 . .	7,482	3,490	7,940	5,380	5,989

(a) Excludes interest and redemption included in total.

South Australia

Department of Marine and Harbors. All South Australian harbours are controlled by the Department of Marine and Harbors, which is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the six deep-sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, Port Giles and Thevenard. In South Australia there are also six privately-owned and operated ports. The principal of these are Whyalla, Ardrossan, Rapid Bay, Proper Bay (Broken Hill Pty Co. Ltd), and Port Stanvac (Petroleum Refineries (Aust.) Pty Ltd). Maximum depths of water (low water) at the wharves of the main ports range from 8.2 metres at Port Pirie to 15.0 metres at Port Lincoln. The following table shows the finances of the Department for 1970–71 to 1974–75.

DEPARTMENT OF MARINE AND HARBORS, SOUTH AUSTRALIA: FINANCES
($'000)

Year	*Loan indebtedness at 30 June*	*Revenue*	*Expenditure from revenue*			*Surplus(+) or Deficit(−)*
			Working expenses	*Interest*	*Total*	
1970–71	55,081	7,628	5,056	2,431	7,487	+ 141
1971–72	57,824	7,611	5,346	2,796	8,142	− 530
1972–73	62,655	7,324	5,453	3,028	8,481	−1,157
1973–74	67,082	10,037	6,537	3,359	9,896	+141
1974–75	73,013	10,889	8,425	3,828	12,253	−1,365

Western Australia

The *Port of Fremantle* is operated and controlled by the Fremantle Port Authority. The port covers an extensive water area of some 466 square kilometres and comprises an inner and an outer harbour. The inner harbour includes 20 deep-water land-backed berths, providing more than 56,800 square metres of covered storage space and 3,994 metres of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 11 metres. The outer harbour includes 3 main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 14 metres and a bottom width of 152 metres. In the outer harbour there are 3 tanker berths each with a low water depth of 13 metres at the Kwinana oil refinery, 2 berths at the nearby steelworks jetties with a low water depth of 12 metres, 2 berths at the alumina works jetty with a low water depth of 12 metres and 1 berth at the bulk cargo jetty with a low water depth of 13 metres. There is also a special berth for the handling of explosives. Total effective berth accommodation in the outer harbour is 1,862 metres. Gross earnings amounted to $15,509,000 for 1974–75, working expenses to $11,784,000, interest charges on loan capital to $1,510,000 and loan indebtedness totalled $25,394,000.

The Ports of *Albany*, *Bunbury*, *Esperance*, *Geraldton* and *Port Hedland* are controlled by their respective Port Authorities.

Other ports. The following ports are controlled by the State Government Harbour and Light Department: Broome, Carnarvon, Derby, Onslow, Port Walcott and Wyndham. Ports privately controlled comprise Yampi and Dampier, both operated by iron ore mining companies, and Exmouth, the port serving the communications installation at North West Cape. A private buoyed sea terminal is operated at Barrow Island for the shipment of crude oil, and private interests ship salt at Cape Cuvier, and salt and gypsum from Useless Loop in Shark Bay.

Tasmania

Port services in Tasmania are under the control of seven port authorities: the Marine Boards of Hobart, Devonport, Burnie, Circular Head (Stanley), King Island (Currie), Flinders Island (Whitemark) and the Port of Launceston Authority. Port facilities previously under the control of the Smithton Harbour Trust were vested in the Circular Head Marine Board from July 1973. The ports at Hobart, Launceston (Bell Bay), Burnie and Devonport are general cargo terminals for overseas and interstate shipping. Other ports catering primarily for overseas export of specialised cargoes include Port Latta (iron ore pellets), Triabunna (wood chips), and Port Huon (fruit).

AUTHORITIES CONTROLLING PORTS, TASMANIA: FINANCES
1970-71 TO 1974-75
($'000)

Authority	*Loan indebtedness at 30 June*	*Receipts (revenue account) total*	*Expenditure (revenue account)*			*New loans raised*	*Loan expenditure*
			Works and services	*Loan charges*	*Total (a)*		
Hobart	9,721	3,062	1,175	784	2,883	2,014	2,921
Launceston	9,412	4,619	2,302	1,012	4,215	594	610
Devonport	7,589	2,051	789	799	1,838	500	773
Burnie	12,083	2,376	660	1,020	2,117	16	321
Circular Head	1,046	154	32	98	150	90	60
King Island	98	90	36	12	85	..	7
Flinders Island	184	50	37	15	57	..	1
Total 1974–75	**40,133**	**12,402**	**5,031**	**3,740**	**11,345**	**3,214**	**4,693**
1973–74	38,656	10,159	3,785	3,362	9,310	3,067	3,150
1972–73	36,973	9,007	2,761	3,026	7,170	3,457	4,805
1971–72	34,648	7,752	2,928	2,844	7,194	4,590	5,261
1970–71	31,057	7,133	2,618	2,535	6,366	4,471	5,042

(*a*) Includes expenditure not specified in component items.

CHAPTER 19

EDUCATION

Introduction

Year books prior to 1974 have given a detailed factual and historical account of education in Australia. In recent years there have been significant changes, particularly in the Commonwealth Government's programs of financial support for education. Other developments of importance are still in progress. In this issue, the descriptive section on education is confined to a general account of the major new developments that are taking place. For a comprehensive picture of the present scene, this account should be read in conjunction with the detailed material in the 1973 Year Book No. 59. This chapter does, however, include a full set of statistical tables giving the usual coverage of basic education statistics.

State and Commonwealth Government responsibilities in education

Briefly, the respective governmental responsibilities for education in Australia are as follows. The six State governments are responsible for providing education services for their citizens. They administer systems of primary, secondary and technical education; tertiary institutions in the States (universities and colleges of advanced education) are established under Acts of the State parliaments; and the conditions under which private educational institutions in the States may operate are determined by the State authorities. Detailed information on the education system of the States may be found in the respective State year books.

The Commonwealth Government is responsible for the provision of education facilities in the Australian Capital Territory, the Northern Territory, Norfolk Island, Christmas Island and the Cocos (Keeling) Islands (*see* Chapter 30 of this Year Book for details), for Australia's participation in education activities at the international level, and for migrant education. Also, in recent years, the Commonwealth Government has provided the State governments with substantial financial assistance specifically for schools, universities, colleges of advanced education, and technical colleges. In addition, the Commonwealth Government has administered Australia-wide schemes of financial assistance for students for many years.

Developments in Primary and Secondary Education

Government assistance to the States

Since 1945 education authorities in Australia have been faced with the task of rapidly providing more schools, more teachers and better facilities for a rapidly growing school population. In recent years the Commonwealth Government has made substantial financial grants to the States specifically for expenditure on government and non-government schools.

In December 1972 the Commonwealth Government appointed the Interim Committee for the Schools Commission (the Karmel Committee) to assess the financial needs of primary and secondary schools throughout Australia. In May 1973 this Committee made its recommendations on the needs of schools for assistance in the two years 1974 and 1975. These recommendations were substantially accepted by the Commonwealth Government. Expenditure in 1976 has been calculated to ensure that the level and standard of activities which were reached by the end of 1975 are maintained. There has however been a small reduction in capital expenditure.

The Schools Commission was established in December 1973 to administer the programs developed by the Karmel Committee. The Commission is a small expert body responsible to the Commonwealth Minister for Education and serviced by its own professional and secretarial staff. It is working closely with State, non-government, and other national education authorities: to develop a national perspective on primary and secondary education; to ensure that the needs of children throughout Australia are identified and met; to ensure that national resources are directed towards meeting educational priorities on a needs basis; and to encourage innovations in education.

The broad programs of financial assistance provided by the Commonwealth Government through the Commission are intended to supplement the resources supplied by State and non-government school authorities for government and non-government schools. Decisions on the allocation and use of funds, including those provided by the Commission, are made by these authorities. The Commission operated seven programs of assistance in 1974 and 1975 but these have been reduced to six in 1976. They involve the provision of the following:

Recurrent grants related to the needs of schools.

Funds for general buildings.

Funds designated for the improvement of schools serving socio-economically disadvantaged areas. Supplementary building grants are being made and funds are also being provided for the running costs of compensatory education programs in these schools.

Funds for the improvement of special education for handicapped children. Grants are being provided for the building and replacement of special education facilities, and to augment the funds for the running costs of both government and non-government special schools and classes, and for special education teacher training and related teacher replacement.

Funds for experimental programs of an innovative nature at the school system level.

Funds for improvement of education services, particularly through the development of teachers and others involved in schools. This program, which began in 1976 is an extension of the previous Teacher Development Program. The funding of education centres for teachers, a school travel and exchange scheme and the training of Aborigines for educational leadership are parts of the program.

A seventh program, for school libraries, which operated in 1974 and 1975 to provide funds for the development of library-resource centres in schools and for basic courses in school librarianship for teachers was absorbed by several of the Commission's other programs in 1976.

The Australian Education Council

The State and Commonwealth Ministers for Education meet regularly as the Australian Education Council to consider matters of mutual interest. In recent years a number of significant developments have been initiated following agreements reached at these meetings: for example, in 1975 the Council commenced its second survey of education needs in Australia, and it established a working party to investigate the problems confronting young people in the transition from school to work. It has been instrumental in encouraging most of the recent projects involving inter-State co-operation in curriculum development (*see School Curricula* page 655). The Council is currently considering ways of increasing its effectiveness as a national education forum.

Decentralisation and community involvement

There is a trend in Australian education towards a degree of decentralisation in the administration of primary and secondary education. Most States have established regional administrations responsible to a greater or lesser extent for matters, such as staffing, which were formerly undertaken by the central administration, and for professional services to schools.

As well as this movement towards decentralisation of administration, greater responsibility is being given to representative bodies at the school and local community level for matters such as the educational objectives of the school and the development and upkeep of its physical, financial and other resources. There has also been a greater emphasis on the professional role of individual teachers and principals in developing the content and methods of education.

Public secondary examinations

There has been for a number of years a trend towards abolition of State-wide public examinations at the secondary level. The following is the position in each of the States and Territories in 1976.

New South Wales. The only external examination is for the Higher School Certificate at the end of the final year (Year 12). The School Certificate, which is based on teacher assessment and internal school examinations is awarded at the end of fourth year (Year 10) of secondary schooling.

Victoria. The only external examination is for the Higher School Certificate (Year 12). Schools issue a statement of achievement to students who do not sit for this examination or who leave school before Year 12.

Queensland. Those completing three years of secondary schooling (end of Grade 10) are issued with a Junior Certificate, based on teacher assessment and internal school examinations. The Senior Certificate, is awarded on the same basis at the end of the full secondary course (Grade 12).

South Australia. An achievement statement, based on school assessment, records progress in the first four years of secondary schooling (Years 8 to 11). An external certificate is issued at the end of Year 12 on the basis of the Matriculation Examination.

Western Australia. An Achievement Certificate, based on school assessment, records progress in the first three years of secondary schooling (Years 8 to 10). A Leaving Certificate is issued to students at the end of Year 12 based on School assessment and results in the Tertiary Admissions Examination which was introduced in 1975.

Tasmania. The School Certificate is awarded by individual schools at the end of four years of Secondary Schooling (Year 10). An external Higher School Certificate examination may be taken at the end of Year 11 or Year 12. Government Matriculation Colleges where students are exclusively concerned with Higher School Certificate subjects, are situated in Hobart, Launceston and Devonport and a college is planned for Burnie. Students in other districts attend ordinary high schools for the final two years of secondary education.

Northern Territory. Schools in the Northern Territory use the South Australian examination and certification system although some changes are expected to be made in the near future.

Australian Capital Territory. The New South Wales Higher School Certificate will be issued to A.C.T. students for the last time in 1976. The School Certificate (end Year 10) is being replaced in 1976 by formal reports issued by each school recording a student's achievements. Students in Year 11 in 1976 enrolled for the first time in Secondary Colleges receive profile reports at the end of Year 12 based on internal college assessment. Courses taught in the colleges are subject to accreditation by a centralised syllabus accreditation agency.

School curricula

Each State Education Department has a curriculum development unit. These units have worked in close co-operation with examination boards, but with reductions in the number of external examinations, the emphasis now is rather on ensuring that schools have available to them curriculum materials which they can use or adapt to meet the specific educational needs of their students.

This change in emphasis has been accentuated by the tendency in recent years for new schools (particularly primary schools) to be built in an open plan design. These open area schools are attempting to explore the possibilities of a more flexible learning situation by encouraging individual pupils to use a diverse range of educational materials suited to their particular needs under the guidance of a group of teachers working as a team.

An important development of recent years has been increasing co-operation between the States in the development of curricula. This co-operation has been fostered by Commonwealth Government involvement and financial support for national curriculum projects such as the Australian Science Education Project under which science learning materials for junior secondary classes have been developed.

A national Curriculum Development Centre has been established to foster curriculum and materials development from pre-school to post-secondary level. A major project being funded by the Curriculum Development Centre is the Social Education Materials Project. This project, covering a wide range of topics in social education, has development teams working in all States with the close collaboration of education authorities and teachers in social education.

The following two committees were established in 1974 to investigate on a national basis particular questions affecting curriculum.

(1) A committee to inquire into the teaching of the languages of the major migrant groups in schools. The committee was established to investigate the extent to which the languages of the main migrant groups are taught in Australian schools and to recommend how such teaching can be extended. The committee included representatives of Commonwealth and State Education Departments, teachers, parents, non-government school authorities and migrant communities. It presented its report early in 1976.

(2) A national committee on English teaching. The committee was established by the Commonwealth Minister for Education with the co-operation of the State education authorities. The committee is investigating ways in which written and spoken English may be taught more effectively in schools. Its activities are expected to be transferred to the Curriculum Development Centre in the second half of 1976.

Developments in the education of special groups

Aboriginal people

In those areas of Australia where Aboriginal people retain their own languages and communities, attempts are now being made to meet their educational needs as seen by the people themselves. Among recent innovations are a bilingual program in schools in Aboriginal communities and special methods planned to identify and cater for the educational needs of small 'outstation' groups, usually speakers of the one language, who have decided to establish themselves at some distance from larger communities.

The teaching of Aboriginal children in their own languages was commenced in South Australia several years ago. The Commonwealth Government has established bilingual programs in nineteen Northern Territory schools and similar programs are being developed in schools in Queensland and Western Australia. These programs aim to ease the young child's entry to the school situation by establishing literacy in his own language and to recognise the place which the child's heritage of language and culture should occupy in his education. It is considered that the approach of establishing literacy in the child's own language followed by increasing use of English will lead to greater competence with the English language than has been the case for these children in the past.

The 'outstation' approach to the education of small and isolated Aboriginal communities, some of which do not remain permanently at one location, is an attempt to provide a modified education service for these people, having regard to the principle that services will be provided at the request of the community concerned and within the general terms which that community lays down. Use is being made of mobile schools and specially selected visiting advisory teachers for these communities. Aboriginal teachers have a central role in these programs.

Development of these new approaches to the education of Aboriginal people is still in the early stages, and they will be further developed and modified in the light of experience.

The Commonwealth Government has direct responsibility for the education of Aboriginal people living in the Northern Territory. Details of provisions made for these Aboriginal people are given in Chapter 30, The Territories of Australia.

Under the annual Appropriation Acts of the Commonwealth Parliament the Government provides grants to the States to assist the extension and improvement of educational facilities for Aborigines living in the States. The grants are administered by the Minister for Aboriginal Affairs. Additional pre-schools, homework centres, teaching materials, in-service courses for teachers, conferences and research activities, and the employment of special staff such as Aboriginal teaching assistants, remedial, resource and specialist teachers are some of the items resulting from this assistance.

Migrant education

For many years State and Commonwealth Government education authorities have co-operated in the provision of English language instruction for adult migrants and for migrant children in the schools. Until the end of 1975 the Commonwealth Government made grants to government and non-government school authorities in the States to reimburse the costs of teaching English to migrant children in special classes, in many cases in demountable classrooms provided specifically for this purpose. From the beginning of 1976 Commonwealth Government finance for the education of migrant children has been provided to the States as part of the Schools Commission's programs (*see* above), however, the policy and co-ordination role remains with the Commonwealth Department of Education. The intention is to encourage the States to use the funds more flexibly in accordance with local needs. Reimbursements of expenditure incurred in adult migrant education are made by the Commonwealth Minister for Education under the *Immigration* (*Education*) *Act* 1971.

The Commonwealth Department of Education, through its Language Teaching Branch, develops and produces teaching and learning materials and tests for use in Australian programs for teaching English as a second or foreign language. It provides professional advice on education aspects of language teaching programs and consults with education authorities and institutions on the implementation of new courses and programs.

Research is undertaken into materials, methods of teaching and general developments in the field of language teaching.

For further details on migrant education, *see* Chapter 7, Population.

Education of handicapped children

Information on the Special Education program administered by the Schools Commission has been provided earlier in this section.

Tertiary Education—Major Developments

Funding of tertiary institutions

Since 1 January 1974 the Commonwealth Government has had full financial responsibility for universities and colleges of advanced education throughout Australia. Prior to 1974 the State and the Commonwealth Governments shared the financial responsibility for these institutions in the States.

The Commonwealth Government is advised on its support for tertiary education by two statutory agencies, the Universities Commission (for universities), and the Commission on Advanced Education (for colleges of advanced education).

The Commonwealth Government decided that, from the beginning of 1974 when it assumed full financial responsibility for tertiary education, tuition fees should no longer be charged for courses which lead to formal qualifications at universities and colleges of advanced education. Tuition fees have been abolished for such courses at technical colleges also. Complementing the abolition of fees are arrangements for providing means-tested living allowances for students undertaking post-secondary courses (*see* page 658). All full-time students in approved courses at post-secondary institutions may receive these allowances subject to the means test requirements.

Teacher education

From July 1973, under the terms of an agreement between the Commonwealth and the States, the State teachers colleges which were administered by State Education Departments were brought under similar funding arrangements as those for colleges of advanced education. From then on these colleges moved towards assuming the characteristics of autonomous colleges of advanced education. Some are extending their range of courses and may develop as multi-faculty institutions. From January 1974 the Commonwealth Government assumed full financial responsibility for them along with the other colleges of advanced education.

Since January 1974, the Commonwealth Government has also provided assistance with the running costs of approved non-government teachers colleges training primary and secondary teachers.

Other current developments in tertiary education

The Government has agreed to provide special grants to universities to encourage the establishment of courses or Chairs of Community Practice in medical schools. To date, approval has been given for the development of programs in community practice in nine universities.

The Government is providing funds to establish Australia's first national post-graduate school management education, which will be located at the University of New South Wales.

New developments which will be supported over the next few years include:

the establishment of new medical schools at the University of Newcastle and the James Cook University of North Queensland;

the development of Deakin University at Geelong in Victoria.

Technical and Further Education

The term 'further education' has come into use in Australia, sometimes in association with 'technical education', to embrace the varied field of post-school educational provisions which do not come within the tertiary education area. 'Adult education' is a major component of the further education field.

Two States, South Australia and New South Wales, have Government Departments which are responsible only for technical and further education. In the Australian Capital Territory an interim Technical and Further Education Authority was established in September 1975. In all other States and the Northern Territory, technical and further education is administered by a division within the Department of Education.

In 1973 the Commonwealth Government established the Australian Committee on Technical and Further Education (ACOTAFE) to advise it on short-term needs in technical and further education with a view to the expansion of its financial assistance. The Committee was required to take into account promotion of the vigorous and well balanced development of technical and further education throughout Australia, overall manpower policy and national and local occupational requirements, and the needs and aspirations of individuals seeking to undertake technical and further education courses. After considering the Committee's recommendations the Government decided to introduce a program of capital and recurrent grants to the States for technical and further education from July 1974. The main elements of the program, which has been extended to continue until the end of 1976, are summarised below:

General building grants which may be used for the preparation of development plans for technical colleges and similar institutions, for the purchase of land and for the construction and equipping of buildings.

Grants to improve facilities and equipment at existing colleges.

Grants for construction of student residential accommodation.

General recurrent grants which the States may use as they see fit to supplement their own expenditure on technical and further education. These grants include a component to compensate the States for the loss of income from tuition fees. (Abolition of fees for post-secondary education was referred to earlier.)

Recurrent grants for expenditure in a number of specified areas, including curriculum research and development, improvement of library services, the provision of external study facilities, student counselling services, and in-service teaching staff development.

In May 1975 the Commonwealth Government established, by Act of Parliament, the Technical and Further Education Commission to replace ACOTAFE. The Commission will advise the Commonwealth Government on assistance for technical and further education on a continuing basis.

Student assistance schemes

This section deals only with financial assistance to students available from the Commonwealth Government on a nation-wide basis. Other student assistance schemes and scholarships are administered by State authorities, educational institutions, and other agencies.

With the exception of post-graduate studies, all full-time students enrolled in approved courses may receive allowances to assist them in meeting living and study expenses, subject to a means test.

Secondary Education

The Secondary Allowances Scheme provides an unlimited number of grants on the basis referred to above for students enrolled in the final two years of secondary education.

A means-tested living allowance is available to full-time adult students who wish to complete the final year of secondary education.

Post-secondary Education

The Tertiary Education Assistance Scheme provides means-tested allowances for all full-time students who are enrolled in approved under-graduate courses in universities and colleges of advanced education, and in a wide range of approved courses in technical and further education institutions. Post-secondary students generally are benefiting from the abolition of tuition fees in 1974.

Post-graduate Education

A limited number of post-graduate awards are offered to students on the basis of relative academic merit. The awards provide a living allowance which is not subject to a means test. There are no fees for post-graduate study.

Early childhood services

In recent years the States and the Commonwealth Government have shown increasing concern for developing early childhood services (*see* the year books of the States for State developments in this field).

Under the Children's Services Program funds are appropriated to provide for capital and recurrent assistance for the establishment and operation of a range of care and associated services for children, including educational services for young children. Financial assistance is provided to community organisations, local government bodies and the States. The Commonwealth Government has established an Office of Child Care in the Department of Social Security. This Office advises on and administers the Children's Services Program, including projects and services administered by the former Interim Committee for the Children's Commission. This includes capital and recurrent grants under the provision of the *Child Care Act* 1972.

Educational training in the Defence Force

Detailed information on educational training in the Defence Force is contained in Chapter 4, Defence. Summary statistics of educational training provided by service establishments are shown on page 672.

EDUCATION STATISTICS

For the most recent statistics available on subjects dealt with in this chapter reference should be made to the series of mimeographed bulletins on social statistics issued by the Australian Bureau of Statistics. These bulletins comprise *Schools* (13.5), *Teacher Education* (13.12), *Colleges of Advanced Education* (13.10) and *University Statistics* Parts 1, 2, 3 (13.7, 13.8, 13.9). Financial aspects are dealt with in the annual bulletins *Public Authority Finance—Federal Authorities* (5.12), *Public*

Authority Finance—State and Local Authorities (5.43) and *Expenditure on Education* (5.44). The annual reports of the respective State education departments provide detailed statistical and other information about particular States. The Commonwealth Department of Education issues publications on aspects of primary, secondary and tertiary and other post-secondary education.

Summary tables

Statistics summarising the number of educational institutions in Australia and the number of students attending them in 1975 and earlier years are shown in the following tables. For details of technical and further education institutions and associated enrolments, *see* pages 663–5.

NUMBER OF EDUCATIONAL INSTITUTIONS, 1975

	Schools					
	Govern-ment	*Roman Catholic*	*Other non-govern-ment*	*Uni-versities*	*Colleges of Advanced Education (a)*	*Teachers Colleges (a)*
New South Wales	2,246	624	170	6	21	8
Victoria	2,161	467	111	3	31	5
Queensland	1,209	287	44	3	10	2
South Australia	619	109	42	2	8	..
Western Australia	629	156	35	2	6	..
Tasmania	247	40	18	1	1	..
Northern Territory	86	8	4	..	..	..
Australian Capital Territory	69	20	5	1	1	1
Australia—1975	**7,266**	**1,711**	**429**	**18**	**78**	**16**
1974	7,295	1,731	426	17	78	17
1973	7,311	1,754	422	15	43	57
1972	7,362	1,768	422	15	45	59
1971	7,404	1,769	415	15	44	60

(*a*) All remaining government teachers colleges and all kindergarten teachers colleges were granted college of advanced education status from 1 July 1973.

NUMBER OF STUDENTS ENROLLED AT EDUCATIONAL INSTITUTIONS, 1975

	Schools					
	Govern-ment	*Roman Catholic*	*Other non-govern-ment*	*Uni-versities*	*Colleges of Advanced Education (a)*	*Teachers Colleges (b)*
New South Wales	788,943	185,201	33,667	58,666	26,227	2,281
Victoria	618,112	151,591	47,248	36,674	46,982	1,343
Queensland	327,574	76,100	15,048	20,047	13,473	121
South Australia	234,712	27,363	11,934	12,876	13,773	..
Western Australia	195,288	33,895	10,021	10,790	15,427	..
Tasmania	79,283	9,831	4,265	3,399	2,435	..
Northern Territory	18,857	2,323	650	..	..	..
Australian Capital Territory	35,210	9,895	2,269	5,886	4,240	98
Australia—1975	**2,297,979**	**496,199**	**125,102**	**148,338**	**122,557**	3,843
1974	2,257,854	494,055	124,426	142,859	107,202	(*b*)2,911
1973	2,240,642	491,775	120,994	133,126	61,575	(*b*)27,625
1972	2,228,941	492,914	119,096	128,668	52,034	(*b*)25,754
1971	2,196,571	494,725	116,349	123,776	44,351	(*b*)23,865

(*a*) All remaining government teachers colleges and all kindergarten teachers colleges were granted college of advanced education status from 1 July 1973. (*b*) Excludes students enrolled at both a teachers college and another type of institution; they are included in the statistics for the other institution at which they are enrolled.

Schools

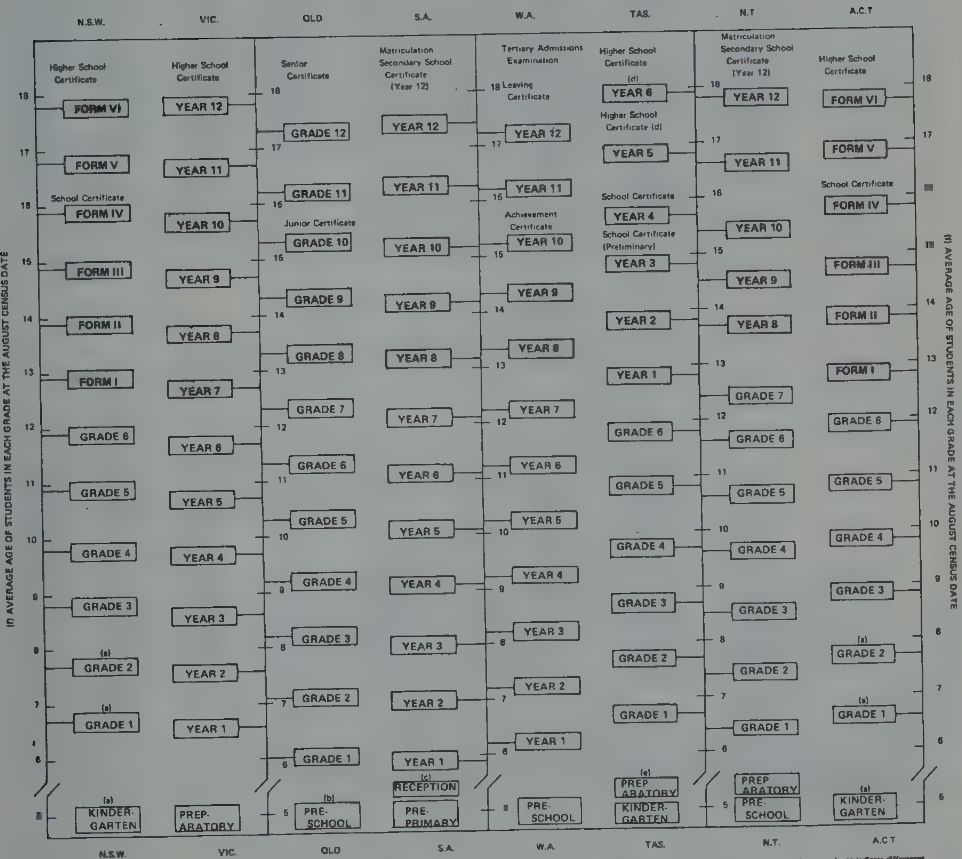
Statistics of government and non-government schools, teachers and students in 1975 and earlier years are shown in the following tables. The number of schools and teachers refer to the position at dates which vary from State to State and in some instances from year to year. Institutions providing only pre-school education, senior technical and agricultural colleges, evening schools, continuation classes, and institutions such as business colleges and coaching establishments are not included in these statistics. Student statistics in the tables which follow refer to the number of students enrolled at the schools included in this collection at the August schools census date. For more detailed statistical information, *see* the annual bulletin *Schools* (13.5).

NUMBERS OF SCHOOLS, TEACHERS AND STUDENTS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1975

		Non-government schools								
		Denominational								
	Government schools	*Church of England*	*Methodist*	*Presbyterian*	*Roman Catholic*	*Other*	*Undenominational*	*Total*	*All schools*
				SCHOOLS					
New South Wales	2,246	32	6	10	624	27	95	794	3,040
Victoria	2,161	31	4	10	467	31	35	578	2,739
Queensland	1,209	13	(*a*)	2	287	20	9	331	1,540
South Australia	619	8	3	2	109	22	7	151	770
Western Australia	629	10	3	2	156	9	11	191	820
Tasmania	247	4	1	2	40	7	4	58	305
Northern Territory	86	..	2	..	8	2	..	12	98
Australian Capital Territory	69	3	..	..	20	1	1	25	94
Australia—1975	**7,266**	**101**	**19**	**28**	**1,711**	**119**	**162**	**2,140**	**9,406**
1974	7,295	102	19	30	1,731	121	154	2,157	9,452
				TEACHERS(*b*)					
New South Wales	40,692	925	217	357	7,808	188	678	10,172	50,864
Victoria	35,264	1,331	283	598	6,301	502	481	9,497	44,761
Queensland	17,183	356	(*a*)	40	3,061	240	254	3,951	21,134
South Australia	12,957	228	145	102	1,148	133	142	1,899	14,857
Western Australia	9,824	289	136	107	1,433	55	49	2,069	11,893
Tasmania	4,251	116	25	46	424	94	12	717	4,967
Northern Territory	1,096	..	16	..	97	9	..	123	1,219
Australian Capital Territory	2,174	124	..	..	423	2	14	563	2,737
Australia—1975	**123,441**	**3,370**	**822**	**1,250**	**20,695**	**1,224**	**1,630**	**28,990**	**152,431**
1974	114,360	3,318	826	1,278	19,871	1,195	1,526	28,010	142,370
				STUDENTS (SCHOOL CENSUS)					
New South Wales	788,943	13,956	3,135	5,473	185,201	3,045	8,058	218,868	1,007,811
Victoria	618,112	19,327	4,347	9,074	151,591	7,941	6,559	198,839	816,951
Queensland	327,574	5,783	(*a*)	509	76,100	4,352	4,404	91,148	418,722
South Australia	234,712	3,754	2,220	1,502	27,363	2,719	1,739	39,297	274,009
Western Australia	195,288	4,253	2,181	1,532	33,895	1,145	910	43,916	239,204
Tasmania	79,283	1,713	366	577	9,831	1,366	243	14,096	93,379
Northern Territory	18,857	..	447	..	2,323	203	..	2,973	21,830
Australian Capital Territory	35,210	1,977	..	..	9,895	50	242	12,164	47,374
Australia—1975	**2,297,979**	**50,763**	**12,696**	**18,667**	**496,199**	**20,821**	**22,155**	**621,301**	**2,919,280**
1974	2,257,845	50,571	12,506	19,196	494,055	20,815	21,338	618,481	2,876,326

(*a*) There are no Methodist schools in Queensland. Schools conducted by the Presbyterian and Methodist Schools Association are included with 'other'. (*b*) Full-time teachers plus part-time teachers are expressed in equivalent full-time units and rounded to whole numbers. Teachers in training are excluded.

GRADES IN GOVERNMENT SCHOOLS, STATES AND TERRITORIES, 1975


N.S.W.
VIC.
QLD
S.A.
W.A.
TAS.
N.T.
A.C.T
(f) AVERAGE AGE OF STUDENTS IN EACH GRADE AT THE AUGUST CENSUS DATE
18
17
16
15
14
13
12
11
10
9
8
7
6
5
Higher School Certificate
FORM VI
FORM V
School Certificate
FORM IV
FORM III
FORM II
FORM I
GRADE 6
GRADE 5
GRADE 4
(a)
GRADE 3
(a)
GRADE 2
(a)
GRADE 1
(a)
KINDER-GARTEN
Higher School Certificate
YEAR 12
YEAR 11
YEAR 10
YEAR 9
YEAR 8
YEAR 7
YEAR 6
YEAR 5
YEAR 4
YEAR 3
YEAR 2
YEAR 1
PREP-ARATORY
Senior Certificate
GRADE 12
GRADE 11
Junior Certificate
GRADE 10
GRADE 9
GRADE 8
GRADE 7
GRADE 6
GRADE 5
GRADE 4
GRADE 3
GRADE 2
GRADE 1
(b)
PRE-SCHOOL
Matriculation Secondary School Certificate (Year 12)
YEAR 12
YEAR 11
YEAR 10
YEAR 9
YEAR 8
YEAR 7
YEAR 6
YEAR 5
YEAR 4
YEAR 3
YEAR 2
YEAR 1
(c)
RECEPTION
PRE-PRIMARY
Tertiary Admissions Examination
Leaving Certificate
YEAR 12
YEAR 11
Achievement Certificate
YEAR 10
YEAR 9
YEAR 8
YEAR 7
YEAR 6
YEAR 5
YEAR 4
YEAR 3
YEAR 2
YEAR 1
PRE-SCHOOL
Higher School Certificate
(d)
YEAR 6
Higher School Certificate (d)
YEAR 5
School Certificate
YEAR 4
School Certificate (Preliminary)
YEAR 3
YEAR 2
YEAR 1
GRADE 6
GRADE 5
GRADE 4
GRADE 3
GRADE 2
GRADE 1
(e)
PREP ARATORY
KINDER-GARTEN
Matriculation Secondary School Certificate (Year 12)
YEAR 12
YEAR 11
YEAR 10
YEAR 9
YEAR 8
GRADE 7
GRADE 6
GRADE 5
GRADE 4
GRADE 3
GRADE 2
GRADE 1
PREP ARATORY
PRE-SCHOOL
Higher School Certificate
FORM VI
FORM V
School Certificate
FORM IV
FORM III
FORM II
FORM I
GRADE 6
GRADE 5
GRADE 4
GRADE 3
(a)
GRADE 2
(a)
GRADE 1
(a)
KINDER-GARTEN

The above diagram shows the usual grades in government primary and secondary schools in each State and Territory. Approximate average ages (at August 1975) for each grade in each State and Territory are given in order to indicate differences in age-grade patterns. The diagram should not be taken as a comparison of academic standards of grades between States. For a more detailed presentation of the systems operating in each State, reference should be made to diagrams, etc. appearing in the annual reports of State Education Departments.

In all States and Territories, the non-government school sector has an average age-grade pattern which is very similar to that for government schools. It should be noted that in some States and Territories there is a trend in both government and non-government schools not to allocate pupils into a grade structure.

Further explanatory notes

(a) In N.S.W. and A.C.T. kindergarten, and grades 1 and 2 are termed "infants" grades.
(b) In Queensland all pre-school children were excluded from the School Census.
(c) Reception refers to children who commenced school for the first time between March and August.
(d) In Tasmania most students study for the Higher School Certificate over a two year period.
(e) In Tasmania, many children attend two years kindergarten grade.
(f) For age distribution within grades refer to age-grade tables which are available on request from the Bureau.

Primary Grades ☐

Secondary Grades ☐

PLATE 45

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: STUDENTS, BY AGE AND SEX AUSTRALIA, 1975

(School census enrolment)

Age last birthday (years)	*Government schools*			*Non-government schools*			*All schools*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Under 6	90,909	86,415	177,324	21,068	21,286	42,354	111,977	107,701	219,678
6	106,670	101,193	207,863	23,428	23,759	47,187	130,098	124,952	255,050
7	102,591	96,463	199,054	23,543	23,670	47,213	126,134	120,133	246,267
8	100,279	94,204	194,483	23,559	24,020	47,579	123,838	118,224	242,062
9	98,490	92,591	191,081	24,219	24,335	48,554	122,709	116,926	239,635
10	99,696	93,496	193,192	25,255	25,370	50,625	124,951	118,866	243,817
11	103,904	96,764	200,668	26,379	26,600	52,979	130,283	123,364	253,647
12	105,028	97,305	202,333	27,675	28,114	55,789	132,703	125,419	258,122
13	104,799	97,218	202,017	27,703	29,125	56,828	132,502	126,343	258,845
14	103,835	95,714	199,549	26,701	28,451	55,152	130,536	124,165	254,701
15	85,444	77,607	163,051	24,674	25,480	50,154	110,118	103,087	213,205
16	54,052	48,503	102,555	18,783	18,879	37,662	72,835	67,382	140,217
17	26,755	23,629	50,384	12,462	11,336	23,798	39,217	34,965	74,182
18	7,013	4,612	11,625	2,782	1,699	4,481	9,795	6,311	16,106
19 and over	1,706	1,094	2,800	525	421	946	2,231	1,515	3,746
Australia—1975	**1,191,171**	**1,106,808**	**2,297,979**	**308,756**	**312,545**	**621,301**	**1,499,927**	**1,419,353**	**2,919,280**
1974	1,171,995	1,085,850	2,257,845	307,413	311,068	618,481	1,479,408	1,396,918	2,876,326

SCHOOLS: STUDENTS, BY AGE, 1975

(School census enrolment)

Age last birthday (years)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Under 6	83,574	65,219	21,561	22,570	10,168	8,085	4,056	4,445	219,678
6	85,061	72,286	37,842	22,843	22,644	8,058	2,113	4,203	255,050
7	81,931	69,356	37,415	22,230	21,722	7,529	2,131	3,953	246,267
8	81,572	67,395	36,848	21,511	21,370	7,521	1,969	3,876	242,062
9	80,528	65,946	36,464	22,529	21,140	7,389	1,827	3,812	239,635
10	82,056	67,332	37,089	22,946	21,363	7,545	1,717	3,769	243,817
11	86,929	68,414	38,881	23,602	21,865	8,386	1,713	3,857	253,647
12	88,833	68,576	39,598	24,219	22,577	8,428	1,585	4,306	258,122
13	88,769	69,861	40,010	24,237	22,354	8,284	1,374	3,956	258,845
14	87,416	68,749	38,970	24,469	21,726	8,587	1,312	3,472	254,701
15	75,503	59,685	28,916	20,649	17,026	7,336	1,045	3,045	213,205
16	48,675	44,075	16,296	14,365	10,046	3,632	601	2,527	140,217
17	28,533	23,697	7,248	6,087	4,845	1,808	284	1,680	74,182
18	7,450	4,756	1,244	1,364	324	479	77	412	16,106
19 and over	981	1,604	(*a*)340	388	34	312	26	61	3,746
Australia—1975	**1,007,811**	**816,951**	**418,722**	**274,009**	**239,204**	(*b*)**93,379**	**21,830**	**47,374**	**2,919,280**
1974	996,720	805,063	412,085	271,372	232,113	92,356	22,243	44,374	2,876,326

(*a*) Excludes 3,800 correspondence students (1,479 males, 2,321 females) aged 19 years and over. (*b*) Excludes 6 correspondence students (2 males, 4 females) who are employed.

Technical and further education

The major part of technical and further education (T.A.F.E.) in Australia is provided in a network of government-administered institutions variously known as colleges, schools or centres of technical or further education. In addition, T.A.F.E. vocational courses are conducted by certain colleges of advanced education and by agricultural colleges in New South Wales and Victoria, and a large number of bodies, both statutory and voluntary, participate in the provision of adult education programs. With the exceptions noted in table footnotes, statistics given in the following section relate only to the technical and further education activities of the major government departments/divisions of T.A.F.E. in each of the six States and the two mainland Territories; they therefore exclude the activities of bodies such as the Board of Adult Education in New South Wales, in the network of evening colleges in that State, the Council of Adult Education in Victoria, and other bodies operating outside the auspices of a government department/division of technical and further education. For further information on the organisation of T.A.F.E. and associated statistical details, *see* the *First Report of the Technical and Further Education Commission*, July 1976 and previous reports of the Australian Committee on Technical and Further Education.

TECHNICAL AND FURTHER EDUCATION: NUMBER OF INSTITUTIONS, 1975(*a*)

	Principal institutions(b)	*Branches/ Annexes/ Centres(c)*	*Total institutions*
New South Wales	64	134	198
Victoria	32	(*d*)183	215
Queensland	23	12	(*e*)35
South Australia	29	254	283
Western Australia	25	79	104
Tasmania(*f*)	5	3	8
Northern Territory	1	4	5
Australian Capital Territory	1	(*d*)10	11
Australia	**180**	**679**	**859**

(*a*) Includes parent institutions and branches/annexes as separate institutions. (*b*) Institutions (other than branches/annexes) having full-time principal officers. (*c*) Affiliated branches/annexes of parent institutions, or autonomous centres with part-time principal officers. (*d*) Includes government high schools in which T.A.F.E. evening classes are conducted (102 in Victoria and 5 in the A.C.T.). (*e*) Includes 10 Adult Education Districts of the Board of Adult Education. (*f*) Excludes centres administered by the Adult Education Division of the Department of Education.

TECHNICAL AND FURTHER EDUCATION: ENROLMENTS(*a*); BY ACADEMIC STREAM AND TYPE OF ENROLMENT: STATES AND TERRITORIES, 1975

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Academic Stream—									
Professional	1,133	589	650	674	285	26	6	144	3,507
Para-professional	53,623	22,901	7,931	26,869	35,880	2,879	239	3,570	153,892
Trades	47,197	35,425	18,907	9,900	17,644	4,062	431	2,334	135,900
Other skilled	75,470	12,873	5,909	18,212	2,306	2,728	289	3,808	121,595
Preparatory	19,823	34,187	14,310	17,609	10,015	955	387	3,476	100,762
Adult education	14,436	22,903	31,909	36,236	42,583	..	2,786	4,504	155,357
Type of enrolment—									
Full-time	16,537	9,611	2,643	3,422	3,790	806	61	1,269	38,139
Part-time	180,697	113,537	64,692	94,592	92,232	9,466	4,069	16,567	575,852
Correspondence	14,448	5,730	12,281	11,486	12,691	378	8	..	57,022
Total—1975	**211,682**	**128,878**	**79,616**	**109,500**	**108,713**	**10,650**	**4,138**	**17,836**	**671,013**
1974	194,010	118,766	78,020	100,550	93,795	10,001	(*b*)n.a.	17,475	(*b*)612,617

(*a*) Statistics shown refer to gross enrolments, no allowance having been made for students enrolled in more than one course. Details reported in this table represent the cumulative total for all enrolments registered in each State and Territory during 1975 up to 31 October. (*b*) Enrolment details for the Northern Territory in 1974 are not available due to the loss of records in cyclone "Tracy". Total Australian enrolments for 1974 exclude the Northern Territory.

TECHNICAL AND FURTHER EDUCATION: ENROLMENTS(*a*) BY ACADEMIC STREAM TYPE OF ENROLMENT AND FIELD OF STUDY, 1975

	Academic stream						
Field of study	*Professional*	*Para-professional*	*Trades*	*Other skilled*	*Preparatory*	*Adult Education*	*Total*
			FULL-TIME				
Applied science	12	406	..	..	780	..	1,198
Art and design	412	2,327	30	99	834	..	3,702
Building industry	..	114	771	133	27	..	1,045
Business studies	30	3,976	..	8,492	932	..	13,430
Engineering	14	4,691	962	171	651	46	6,535
Rural and horticultural	..	173	..	481	28	..	682
Music	..	156	..	..	..	..	156
Para-medical services	..	180	13	..	43	..	236
Service industries	228	1,900	170	232	208	..	2,738
General studies	14	219	21	3	8,143	17	8,417
Total—1975	*710*	*14,142*	*1,967*	*9,611*	*11,646*	*63*	*38,139*
1974(*b*)	659	9,453	1,610	7,636	7,796	54	27,208
			PART-TIME				
Applied science	46	4,383	4	463	5,956	1,274	12,126
Art and design	363	7,768	426	7,010	869	37,121	53,557
Building industry	24	6,331	32,827	3,513	84	13,042	55,821
Business studies	959	54,420	42	37,939	4,869	3,797	102,026
Engineering	291	29,999	76,712	14,977	1,777	5,335	129,091
Rural and horticultural	..	4,050	1,141	4,827	147	2,683	12,848
Music	..	..	..	41	130	3,731	3,902
Para-medical services	112	2,643	348	207	1	160	3,471
Service industries	132	7,109	16,116	31,853	1,419	29,008	85,637
General studies	411	1,499	..	2,149	55,887	57,427	117,373
Total—1975	*2,338*	*118,202*	*127,616*	*102,979*	*71,139*	*153,578*	*575,852*
1974(*b*)	1,946	115,505	122,707	88,095	64,665	135,597	528,515
			CORRESPONDENCE				
Applied science	..	486	..	244	290	..	1,020
Art and design	..	518	1	102	14	621	1,256
Building industry	116	578	921	482	..	..	2,097
Business studies	83	13,623	8	2,837	180	..	16,731
Engineering	..	4,512	3,973	1,388	101	274	10,248
Rural and horticultural	..	913	157	1,776	..	444	3,290
Music	..	..	..	..	..	25	25
Para-medical services	..	518	18	89	128	..	753
Service industries	167	343	1,239	1,079	2	33	2,863
General studies	93	57	..	1,008	17,262	319	18,739
Total—1975	*459*	*21,548*	*6,317*	*9,005*	*17,977*	*1,716*	*57,022*
1974(*b*)	566	24,479	8,358	6,410	16,156	925	56,894
			ALL ENROLMENTS				
Applied science	58	5,275	4	707	7,026	1,274	14,344
Art and design	775	10,613	457	7,211	1,717	37,742	58,515
Building industry	140	7,023	34,519	4,128	111	13,042	58,963
Business studies	1,072	72,019	50	49,268	5,981	3,797	132,187
Engineering	305	39,202	81,647	16,536	2,529	5,655	145,874
Rural and horticultural	..	5,136	1,298	7,084	175	3,127	16,820
Music	..	156	..	41	130	3,756	4,083
Para-medical services	112	3,341	379	296	172	160	4,460
Service industries	527	9,352	17,525	33,164	1,629	29,041	91,238
General studies	518	1,775	21	3,160	81,292	57,763	144,529
Total—1975	**3,507**	**153,892**	**135,900**	**121,595**	**100,762**	**155.357**	**671.013**
1974(*b*)	3,171	149,437	132,675	102,141	88,617	136,576	612,617

(*a*) Statistics shown refer to gross enrolments, no allowance having been made for students enrolled in more than one course. Details reported in this table represent the cumulative total of all enrolments registered during 1975 up to 31 October. (*b*) Figures for 1974 exclude enrolments in the Northern Territory, details of which are not available due to the loss of records in cyclone "Tracy". Northern Territory enrolments for 1975 numbered 4,138 (61 full-time, 4,069 part-time and 8 correspondence).

TECHNICAL AND FURTHER EDUCATION: TEACHING EFFORT(*a*) BY ACADEMIC STREAM, 1975

('000 hours)

Academic stream	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
FULL-TIME STAFF(*b*)									
Professional	5.3	25.0	10.6	1.4	6.3	..	0.3	4.5	53.4
Para-professional	385.8	414.0	34.9	181.8	276.1	19.0	2.8	40.1	1,354.6
Trades	644.7	821.0	376.4	302.4	194.9	100.1	15.3	38.3	2,493.1
Other skilled	319.1	93.0	60.6	24.4	20.4	21.5	2.3	19.4	560.6
Preparatory	98.1	255.0	43.8	45.9	21.4	2.4	1.3	4.4	472.3
Adult education	19.0	37.0	5.4	23.7	6.6	..	2.6	2.1	96.4
Total full-time—									
Teaching effort	*1,472.0*	*1,645.0*	*531.7*	*579.7*	*525.8*	*143.1*	*24.6*	*108.7*	*5,030.5*
Number of teachers	2,743	3,402	831	957	874	276	55	164	9,302
PART-TIME STAFF(*c*)									
Professional	4.9	2.0	4.3	0.9	3.8	0.5	0.6	3.4	20.4
Para-professional	384.2	92.0	53.4	35.4	132.2	24.9	1.5	16.3	739.9
Trades	261.5	50.0	17.3	2.8	47.8	15.3	2.9	13.0	410.6
Other skilled	324.6	34.0	17.8	29.8	17.8	10.4	0.9	15.5	450.8
Preparatory	140.0	129.5	25.2	45.4	24.1	6.9	2.5	18.0	391.5
Adult education	47.1	59.3	46.9	118.4	80.2	..	7.0	14.5	373.6
Total part-time—									
Teaching effort	*1,162.4*	*366.8*	*164.8*	*232.8*	*305.9*	*57.9*	*15.5*	*80.7*	*2,386.8*
Number of teachers	(*d*)5,739	(*d*)2,664	1,855	(*d*)2,541	2,644	516	190	441	16,590
ALL TEACHING STAFF									
Professional	10.2	27.0	14.9	2.3	10.1	0.5	0.9	7.9	73.8
Para-professional	770.0	506.0	88.3	217.2	408.4	43.9	4.4	56.3	2,094.6
Trades	906.2	871.0	393.6	305.2	242.7	115.4	18.2	51.4	2,903.7
Other skilled	643.7	127.0	78.4	54.3	38.2	31.9	3.1	34.8	1,011.4
Preparatory	238.1	384.5	68.9	91.4	45.5	9.3	3.7	22.4	863.9
Adult education	66.2	96.3	52.3	142.1	86.9	..	9.6	16.6	469.9
Total—									
Teaching effort	**2,634.4**	**2,011.8**	696.4	812.5	831.7	201.0	40.0	189.5	7,417.3
Number of teachers	8,482	6,066	2,686	3,498	3,518	792	245	605	25,892

(*a*) Hours of classroom duty performed by teachers during teaching year 1975 (excluding all non-teaching duty). (*b*) All teaching staff employed full-time by the relevant TAFE authority, including "multi-sector" staff whose duties extend to teaching areas other than TAFE. Multi-sector staff numbered 1,602 in 1975, of whom 1,446 were employed in Victoria. Teaching hours reported in this table relate only to teaching duties undertaken in TAFE. (*c*) Statistics of part-time teaching effort relate to all teaching duty performed by staff employed part-time by the TAFE authority, and teaching hours worked on an overtime basis by full-time staff. Details of part-time teacher numbers refer only to teachers employed part-time. (*d*) No allowance has been made for staff who taught at more than one TAFE institution during 1975.

Teacher education

By 1 July 1973 all former government teachers colleges and kindergarten teachers colleges were within the Commission on Advanced Education's area of responsibility. Statistics for those colleges are included in statistics for colleges of advanced education (shown later in this chapter). The following table shows for 1975 the number of students undertaking teacher education courses in non-government teachers colleges.

STUDENTS ENROLLED IN NON-GOVERNMENT TEACHERS COLLEGES, 1975

Type of course	*N.S.W.*	*Vic.*	*Qld*	*A.C.T.*	*Australia*
Primary—					
Males	168	278	56	6	508
Females	1,200	1,000	65	92	2,357
Persons	*1,368*	*1,278*	*121*	*98*	*2,865*
Secondary—					
Males	229	20	..	..	249
Females	160	2	..	..	162
Persons	*389*	*22*	..	..	*411*

STUDENTS ENROLLED IN NON-GOVERNMENT TEACHERS COLLEGES, 1975—*continued*

Type of course	*N.S.W.*	*Vic.*	*Qld.*	*A.C.T.*	*Australia*
Not classifiable as only primary or only secondary—					
Males	200	14	..	..	214
Females	324	29	..	..	353
Persons	*524*	*43*	..	..	*567*
Total—					
Males	**597**	**312**	**56**	**6**	**971**
Females	**1,684**	**1,031**	**65**	**92**	**2,872**
Persons	**2,281**	**1,343**	**121**	**98**	**3,843**

Colleges of Advanced Education

The following statistics refer to operative institutions listed in the appropriate States Grants (Advanced Education) Acts as colleges of advanced education, and the Canberra College of Advanced Education. These tables show details of students commencing advanced level courses, the number of students and teaching staff in 1975 and the number of students who completed advanced level courses in 1974. The reference date for these statistics is 30 April 1975 except for students who completed advanced level courses for whom the reference date is 31 December 1974. For more detailed statistics, *see* the annual bulletin *Colleges of Advanced Education* (13.10).

COLLEGES OF ADVANCED EDUCATION: STUDENTS COMMENCING BY COURSE, LEVEL AND FIELD OF STUDY, 1975

Field of study	*Master degree*	*Graduate diploma*	*Bachelor degree*	*Diploma*	*Associate diploma*	*Total*		
						Males	*Females*	*Persons*
Agriculture	..	40	150	453	214	702	155	857
Applied sciences	43	186	2,389	176	295	2,460	629	3,089
Art and design	..	22	171	1,965	509	1,212	1,455	2,667
Building, surveying and architecture	..	186	682	288	440	1,377	219	1,596
Commercial and business studies	39	1,285	5,770	1,754	1,536	8,341	2,043	10,384
Engineering and technology	15	229	2,629	528	373	3,703	71	3,774
Liberal studies	1	529	2,133	1,564	567	1,992	2,802	4,794
Music	..	5	79	289	..	141	232	373
Para-medical	21	77	984	550	1,097	866	1,863	2,729
Teacher education	49	3,751	1,402	18,025	463	7,865	15,825	23,690
Total—1975	168	6,310	16,389	25,592	5,494	28,659	25,294	53,953
1974	80	4,915	12,165	23,192	4,307	24,402	20,257	44,659

COLLEGES OF ADVANCED EDUCATION: STUDENTS WHO COMPLETED COURSES BY FIELD OF STUDY AND COURSE LEVEL, 1974

Field of study	*Master degree*	*Graduate diploma*	*Bachelor degree*	*Diploma*	*Associate diploma*	*Total*		
						Males	*Females*	*Persons*
Agriculture	..	35	68	208	24	299	36	335
Applied sciences	2	96	544	256	113	849	162	1,011
Art and design	..	19	..	530	126	353	322	675
Building, surveying and architecture	..	14	116	170	92	358	34	392
Commercial and business studies	..	287	575	1,009	314	1,799	386	2,185
Engineering and technology	..	32	487	782	213	1,506	8	1,514
Liberal studies	..	242	233	230	64	342	427	769
Music	..	6	19	144	..	51	118	169
Para-medical	1	51	304	290	414	223	837	1,060
Teacher education	1	2,265	218	9,459	451	3,913	8,481	12,394
Total—1974	4	[illegible],047	2,5[illegible]4	13,078	1,811	9,693	10,811	20,504
1973	1	2,605	1,696	12,538	1,696	8,848	9,688	18,536

COLLEGES OF ADVANCED EDUCATION: STUDENTS BY TYPE OF ENROLMENT COURSE LEVEL AND FIELD OF STUDY, 1975

Field of study	*Master degree*	*Graduate diploma*	*Bachelor degree*	*Diploma*	*Associate diploma*	*Total*		
						Males	*Females*	*Persons*
FULL-TIME								
Agriculture	..	39	360	946	246	1,327	264	1,591
Applied sciences	17	80	2,904	386	127	2,718	796	3,514
Art and design	..	27	222	3,486	610	1,881	2,464	4,345
Building, surveying and architecture	..	..	1,200	508	189	1,607	290	1,897
Commercial and business studies	..	184	4,770	2,171	704	5,841	1,988	7,829
Engineering and technology	8	26	4,365	1,247	295	5,856	85	5,941
Liberal studies	..	341	1,985	1,431	164	1,643	2,278	3,921
Music	..	10	156	536	..	247	455	702
Para-medical	16	64	2,021	1,066	773	976	2,964	3,940
Teacher education	10	3,036	1,670	35,556	827	12,263	28,836	41,099
Total—1975	*51*	*3,807*	*19,653*	*47,333*	*3,935*	*34,359*	*40,420*	*74,779*
1974	23	3,135	14,666	44,026	3,266	30,262	34,854	65,116
PART-TIME—INTERNAL								
Agriculture	..	1	18	24	24	47	20	67
Applied sciences	63	268	2,166	438	321	2,752	504	3,256
Art and design	..	45	43	814	444	745	601	1,346
Building, surveying and architecture	1	339	690	713	922	2,482	183	2,665
Commercial and business studies	41	1,710	6,797	4,219	1,350	12,563	1,554	14,117
Engineering and technology	20	338	2,792	1,125	713	4,941	47	4,988
Liberal studies	1	419	1,922	1,291	522	1,902	2,253	4,155
Music	..	2	117	232	..	96	255	351
Para-medical	20	24	377	109	843	641	732	1,373
Teacher education	115	949	1,243	5,132	30	3,309	4,160	7,469
Total—1975	*261*	*4,095*	*16,165*	*14,097*	*5,169*	*29,478*	*10,309*	*39,787*
1974	165	3,279	13,044	14,821	4,324	27,719	7,914	35,633
PART-TIME—EXTERNAL								
Agriculture	..	..	..	1	71	57	15	72
Applied sciences	..	..	380	20	171	444	127	571
Art and design	..	..	..	11	..	9	2	11
Building, surveying and architecture	..	5	2	..	9	15	1	16
Commercial and business studies	..	210	721	609	765	1,956	349	2,305
Engineering and technology	..	..	30	12	13	55	..	55
Liberal studies	..	21	637	314	103	448	627	1,075
Music	..	..	..	2	..	1	1	2
Para-medical	..	..	..	58	355	155	258	413
Teacher education	..	294	112	3,065	..	1,116	2,355	3,471
Total—1975	..	*530*	*1,882*	*4,092*	*1,487*	*4,256*	*3,735*	*7,991*
1974	..	418	1,194	3,645	1,196	3,459	2,994	6,453
ALL STUDENTS								
Agriculture	..	40	378	971	341	1,431	299	1,730
Applied sciences	80	348	5,450	844	619	5,914	1,427	7,341
Art and design	..	72	265	4,311	1,054	2,635	3,067	5,702
Building, surveying and architecture	1	344	1,892	1,221	1,120	4,104	474	4,578
Commercial and business studies	41	2,104	12,288	6,999	2,819	20,360	3,891	24,251
Engineering and technology	28	364	7,187	2,384	1,021	10,852	132	10,984
Liberal studies	1	781	4,544	3,036	789	3,993	5,158	9,151
Music	..	12	273	770	..	344	711	1,055
Para-medical	36	88	2,398	1,233	1,971	1,772	3,954	5,726
Teacher education	125	4,279	3,025	43,753	857	16,688	35,351	52,039
Total—1975	312	8,432	37,700	65,522	10,591	68,093	54,464	122,557
1974	188	6,832	28,904	62,492	8,786	61,440	45,762	107,202

COLLEGES OF ADVANCED EDUCATION: TEACHING STAFF BY FIELD OF TEACHING STATES AND A.C.T., 1975

(Full-time and part-time academic and non-academic staff in full-time equivalent units, rounded to whole numbers)

Field of teaching	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Australia*
FULL-TIME STAFF								
Agriculture	75	52	48	23	8	..	..	205
Applied sciences	170	397	123	43	87	18	70	907
Art and design	83	182	27	42	28	21	..	384
Building, surveying and architecture	29	56	18	31	34	10	11	189
Commercial and business studies	115	281	74	42	81	19	35	647
Engineering and technology	66	424	68	77	66	16	..	717
Liberal studies	60	330	20	100	93	8	45	656
Music	47	4	10	2	..	15	..	78
Para-medical	86	99	18	44	58	4	..	309
Teacher education	919	1,202	458	400	364	88	43	3,475
Not classifiable	58	122	..	20	4	4	..	208
Total—1975	*1,709*	*3,148*	*864*	*823*	*821*	*203*	*204*	*7,773*
1974	1,581	2,853	(*b*)821	723	756	184	185	7,102
PART-TIME STAFF(*a*)								
Agriculture	2	1	5	..	2	..	..	10
Applied sciences	15	46	19	3	20	3	16	122
Art and design	57	29	..	9	11	4	..	111
Building, surveying and architecture	12	19	28	4	3	2	1	68
Commercial and business studies	8	34	20	7	29	2	14	113
Engineering and technology	17	28	6	2	9	1	..	63
Liberal studies	11	45	6	23	22	..	14	120
Music	23	3	9	..	..	5	..	40
Para-medical	11	24	4	14	16	1	..	70
Teacher education	37	56	26	40	18	27	12	216
Not classifiable	2	54	..	2	2	..	..	60
Total—1975	*195*	*339*	*122*	*103*	*133*	*44*	*57*	*994*
1974	193	289	(*a*)170	105	92	43	44	936
ALL STAFF								
Agriculture	77	53	53	23	9	..	..	214
Applied sciences	186	444	142	45	107	21	86	1,029
Art and design	141	211	27	51	39	25	..	494
Building, surveying and architecture	42	75	46	35	37	12	12	257
Commercial and business studies	123	315	93	49	109	21	49	760
Engineering and technology	84	452	74	79	75	17	..	780
Liberal studies	71	374	26	123	115	8	59	776
Music	70	7	19	2	..	20	..	119
Para-medical	97	123	22	58	74	5	..	379
Teacher education	955	1,258	484	440	381	116	55	3,690
Not classifiable	60	176	..	22	6	4	..	268
Total—1975	**1,905**	**3,488**	**986**	**926**	**954**	**247**	**261**	**8,767**
1974	1,774	3,143	(*a*)991	827	848	227	229	8,038

(*a*) Part-time teaching staff expressed in equivalent full-time units. (*b*) Includes some staff engaged in teaching courses which were not at an advanced level.

Universities

The following university statistics provide details of the total number of students enrolled in university courses, the teaching staff engaged, and the number of students commencing and completing courses. The reference date for the statistics is 30 April except for students completing courses for whom the reference date is the year ended 30 June. For more detailed statistics, *see* the annual publications *University Statistics*, Parts 1 and 2 (13.7 and 13.8).

UNIVERSITIES: STUDENTS COMMENCING DEGREE COURSES, 1975

	Doctorate (other than Ph.D.) courses	*Ph.D. degree courses*	*Master degree courses*	*Bachelor degree courses*	*Total*		
					Males	*Females*	*Persons*
New South Wales	6	321	2,195	15,480	11,294	6,708	18,002
Victoria	14	152	899	10,465	6,790	4,740	11,530
Queensland	16	113	433	4,854	3,071	2,345	5,416
South Australia	10	89	358	3,341	2,454	1,344	3,798
Western Australia	..	99	260	3,704	2,559	1,504	4,063
Tasmania	..	29	50	1,081	731	429	1,160
Australian Capital Territory	..	163	145	1,631	1,172	767	1,939
Australia–1975	**46**	**966**	**4,340**	**40,556**	**28,071**	**17,837**	**45,908**
1974	28	1,004	3,863	39,012	27,444	16,463	43,907

UNIVERSITIES: FULL-TIME AND PART-TIME STUDENTS(a) BY SEX AND COURSE LEVEL, 1971 TO 1975

Level of course	*Males*					*Females*				
	1971	*1972*	*1973*	*1974*	*1975*	*1971*	*1972*	*1973*	*1974*	*1975*
FULL-TIME										
Higher degree	4,293	4,295	4,220	4,486	4,756	889	973	1,041	1,318	1,458
Other post-graduate(b)	1,148	1,544	1,743	1,933	1,926	1,731	2,270	2,223	2,268	2,278
Bachelor degree	47,311	48,851	49,389	52,613	54,029	23,863	25,698	26,962	29,876	32,371
Sub-graduate diploma, certificate and other(c)	753	740	225	213	157	508	446	313	298	135
Total	*52,829*	*54,612*	*55,577*	*59,245*	*60,868*	*26,608*	*28,983*	*30,539*	*33,760*	*36,242*
PART-TIME(*d*)										
Higher degree	6,032	6,429	6,967	7,634	8,288	1,255	1,360	1,549	1,824	2,174
Other post-graduate(b)	1,561	1,532	2,179	2,307	2,497	831	848	1,050	1,151	1,279
Bachelor degree	22,232	21,902	21,967	21,645	20,764	9,238	9,849	10,750	12,234	12,955
Sub-graduate diploma, certificate and other(c)	2,324	2,244	1,528	1,653	1,661	1,127	1,193	1,020	1,406	1,610
Total	*31,971*	*31,928*	*32,641*	*33,239*	*33,210*	*12,368*	*13,145*	*14,369*	*16,615*	*18,018*
ALL STUDENTS										
Higher degree	10,325	10,724	11,187	12,120	13,044	2,144	2,333	2,590	3,142	3,632
Other post-graduate(b)	2,709	3,076	3,922	4,240	4,423	2,562	3,118	3,273	3,419	3,557
Bachelor degree	69,543	70,753	71,356	74,258	74,793	33,101	35,547	37,712	42,110	45,326
Sub-graduate diploma, certificate and other(c)	3,077	2,984	1,753	1,866	1,818	1,635	1,639	1,333	1,704	1,745
Total	**84,800**	**86,540**	**88,218**	**92,484**	**94,078**	**38,976**	**42,128**	**44,908**	**50,375**	**54,260**

(*a*) For the years 1971 and 1972, the components do not add to total students as students enrolled for two or more courses were included in each course for which they were enrolled. (*b*) Includes, as well as post-graduate diploma courses, masters and other post-graduate preliminary and qualifying courses which were included with *Sub-graduate diploma, certificate and other* prior to 1973. (*c*) *Other* refers to single and miscellaneous subjects of university standard. *See also* footnote(*b*). (*d*) Includes external students.

UNIVERSITIES: STUDENTS COMPLETING DEGREE AND POST-GRADUATE DIPLOMA COURSES BY FIELD OF STUDY, YEAR ENDED 30 JUNE 1975

Field of study	*Degrees*					
	Doctorate (other than Ph.D.)	*Ph.D.*	*Master*	*Bachelor*	*Post graduate diplomas*	*Total*
Humanites	1	79	210	7,048	..	7,338
Fine arts	..	1	7	110	..	118
Social and behavioural sciences	..	48	113	526	552	1,239
Law	..	3	38	1,006	39	1,086
Education	..	12	221	807	3,066	4,106
Economics, commerce, government	..	18	309	3,065	70	3,462
Medicine	29	60	17	1,463	82	1,651
Dentistry	2	3	13	218	6	242
Natural sciences	11	379	238	4,862	103	5,593
Engineering, technology	1	107	268	1,718	42	2,136
Architecture	..	3	49	474	33	559
Agriculture, forestry	1	29	66	358	60	514
Veterinary science	1	8	11	205	1	226
Total—1975	**46**	**750**	**1,560**	**21,860**	**4,054**	**28,270**
1974	45	726	1,310	21,115	3,966	27,162

UNIVERSITIES: TEACHING STAFF(*a*), BY FIELD OF TEACHING, 1975

FULL-TIME STAFF

Field of teaching	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
Humanities	642	439	198	156	94	46	132	1,706
Fine arts	26	36	14	28	9	..	..	112
Social and behavioural sciences	469	210	115	91	85	27	47	1,042
Law	108	116	29	25	16	13	30	337
Education	237	140	61	46	45	12	..	541
Economics, commerce, government	429	242	130	80	63	27	58	1,028
Medicine	255	252	158	100	75	36	1	876
Dentistry	41	29	29	22	14	..	..	135
Natural sciences	985	586	359	293	170	88	118	2,597
Engineering, technology	492	181	109	50	57	22	..	910
Architecture	112	36	24	16	8	..	..	196
Agriculture, forestry	102	45	37	40	21	8	16	269
Veterinary science	50	36	50	..	7	..	..	143
Other(*b*)	2	..	48	..	..	1	..	51
Total—1975	*3,950*	*2,346*	*1,360*	*945*	*662*	*280*	*402*	*9,943*
1974	3,640	2,251	1,243	883	575	271	369	9,231

PART-TIME STAFF (full-time equivalent units)(*c*)

Field of teaching	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
Humanities	41	17	11	5	5	1	6	86
Fine arts	3	11	1	3	2	..	..	20
Social and behavioural sciences	39	10	9	4	7	..	5	75
Law	7	3	2	2	2	..	2	20
Education	65	26	3	2	6	1	..	103
Economics, commerce, government	35	13	3	3	5	1	3	63
Medicine	92	75	34	10	16	2	..	229
Dentistry	19	10	7	15	8	..	..	58
Natural sciences	155	94	25	42	29	11	9	365
Engineering, technology	53	32	8	8	4	2	..	107
Architecture	27	8	4	3	4	..	..	46
Agriculture, forestry	9	5	3	1	2	1	1	22
Veterinary science	3	1	2	..	..	..	..	7
Other(*b*)	1	..	7	..	..	..	..	8
Total—1975	*550*	*304*	*119*	*98*	*91*	*20*	*28*	*1,210*
1974	512	374	99	103	82	17	17	1,204

UNIVERSITIES: TEACHING STAFF(*a*), BY FIELD OF TEACHING, 1975—*continued*

Field of teaching	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
ALL STAFF (full-time equivalent units)								
Humanities	683	456	209	161	98	47	138	1,792
Fine arts	29	47	15	31	11	..	..	132
Social and behavioural sciences	508	220	123	94	92	27	52	1,117
Law	115	119	31	27	19	13	32	356
Education	302	166	64	48	51	13	..	644
Economics, commerce, government	463	255	133	83	68	28	61	1,092
Medicine	347	326	192	109	91	38	1	1,105
Dentistry	60	38	36	37	22	..	..	193
Natural sciences	1,140	679	384	334	199	99	127	2,962
Engineering, technology	545	213	119	58	61	24	..	1,017
Architecture	139	44	28	19	11	..	..	242
Agriculture, forestry	111	50	40	41	23	9	17	291
Veterinary science	53	36	52	..	7	..	..	150
Other(*b*)	3	..	55	..	..	1	..	59
Total—1975	4,499	2,650	1,479	1,043	753	299	430	11,153
1974	4,152	2,625	1,342	986	657	288	386	10,435

(*a*) Excludes research only staff. (*b*) Includes staff teaching in the field of general studies and also a small number of staff unallocated to field of teaching. (*c*) The conversion of part-time staff to equivalent full-time units is made on the following basis: lecturer—250 hours per annum; and tutor/demonstrator—700 hours per annum.

Overseas students

The following table shows the number of private students and sponsored overseas students and trainees in Australia at 30 June 1974 and 1975, respectively. The Department of Immigration and Ethnic Affairs and the Department of Education prepare statistics of overseas students admitted under the *Private Overseas Student Program*. Further details on sponsored overseas students and trainees in Australia are available from publications issued by the Australian Development Assistance Bureau within the Department of Foreign Affairs.

OVERSEAS STUDENTS: NUMBER OF PRIVATE STUDENTS AND SPONSORED STUDENTS AND TRAINEES BY LAST PLACE OF RESIDENCE, AS AT 30 JUNE

		Sponsored students and trainees—1975				
Last place of residence	*Private students 1974*	*Colombo Plan*	*Commonwealth Co-operation in Education*	*Home government*	*Other*	*Total*
Europe	72	..	3	..	4	7
Africa	76	..	85	25	102	212
America	265	..	9	1	4	14
Asia—						
Burma	7	51	..	..	3	54
China—						
Excluding Taiwan Province	..	..	..	..	..	..
Taiwan Province only	70	..	..	..	..	..
Hong Kong	821	..	1	19	..	20
India	119	14	5	..	..	19
Indonesia	530	214	..	..	15	229
Japan	261	..	..	..	..	..
Khmer Republic	14	64	..	..	4	68
Laos	14	104	..	1	..	105
Malaysia	4,853	330	6	60	6	402
Pakistan	67	36	1	1	1	39
Philippines	317	40	..	..	4	44
Singapore	629	173	1	120	2	296
Sri Lanka	70	49	5	..	4	58
Thailand	336	218	..	..	10	228
Viet Nam	79	315	..	..	20	335
Other Asia	60	167	5	8	12	192
Total	*8,247*	*1,775*	*24*	*209*	*81*	*2,089*

OVERSEAS STUDENTS: NUMBER OF PRIVATE STUDENTS AND SPONSORED STUDENTS AND TRAINEES BY LAST PLACE OF RESIDENCE, AS AT 30 JUNE—*continued*

		Sponsored students and trainees—1975				
Last place of residence	*Private students 1974*	*Colombo Plan*	*Commonwealth Co-operation in Education*	*Home government*	*Other*	*Total*
Oceania—						
Fiji	186	..	19	3	29	51
Nauru	81	..	..	..	..	..
New Caledonia	40	..	..	..	1	1
Papua New Guinea	408	..	..	..	206	206
Solomon Islands	50	..	15	..	5	20
Tonga	50	..	22	1	20	43
Other Oceania	82	..	34	..	24	58
Total	*897*	..	*90*	*4*	*285*	*379*
Total overseas students	**(*a*)9,563**	**1,775**	**211**	**239**	**476**	**2,701**

(*a*) Includes six students for whom last place of residence was not stated.

Educational training in the Defence Force

The following table shows the number of students enrolled in training establishments for Service personnel.

SERVICE ESTABLISHMENTS PROVIDING EDUCATIONAL TRAINING: AUSTRALIA, 1974 AND 1975

	Students enrolled		*New entrants during year*		*Number completing course during year*	
Establishment	*1974*	*1975*	*1974*	*1975*	*1974*	*1975*
Staff colleges—						
Joint Services Staff College	66	72	66	72	66	72
Australian Staff College	80	80	80	80	80	80
Royal Australian Air Force Staff College	36	36	36	36	35	35
Officer cadet training establishments—						
Royal Australian Naval College	188	145	80	54	60	60
Royal Military College	359	482	107	134	55	61
Royal Australian Air Force Academy	111	86	39	36	12	20
Apprentice schools—						
Navy	480	349	201	187	329	328
Army	401	353	113	240	207	126
Air Force—						
Wagga Wagga	270	229	127	130	104	88
Laverton	94	64	31	17	20	22
Other—						
Royal Australian Navy Junior Recruit Training School	761	658	714	643	648	596
Royal Australian Air Force School of Languages	40	35	40	35	40	33

Student assistance schemes

The following table on student assistance schemes is taken from selected recent statistics published by the Department of Education.

STUDENT ASSISTANCE SCHEMES FUNDED BY THE DEPARTMENT OF EDUCATION

	Number of students		*Expenditure($'000)*	
Scheme(a)	*1974*	*1975*	*1973–74*	*1974–75*
Postgraduate Awards(*b*)	2,157	2,225	7,473	8,124
Tertiary Education Assistance(*b*)	70,099	73,886	34,867	77,336
Technical Scholarships(*b*)	1,548	486	516	128
Pre-school Teacher Education(*b*)	1,656	2,126	1,755	2,648
Postgraduate Awards—Social Work(*b*)	..	19	..	33
Secondary Scholarships(*b*)	86	..	968	6,127
Senior Secondary Scholarships(*b*)	48,502	24,107	9,763	
Secondary Allowances(*c*)	8,500	9,783	1,164	2,472
Adult Secondary Education Assistance(*b*)	..	1,021	..	759
Aboriginal Secondary Grants(*b*)	10,669	11,762	6,093	7,197
Aboriginal Study Grants(*c*)	1,460	1,875	905	1,403
Aboriginal Study Grants—Overseas(*c*)	..	8	..	5
Assistance for Isolated Children(*c*)	17,882	19,037	8,188	9,539
Education Assistance for Darwin Students(*b*)	..	9,968	..	967
Non-State Tertiary Institutions—Fees(*c*)	..	13,145	..	1,615
Ex-Servicemen's Vocational Training Schemes(*b*)(*d*)	433	(*d*)	820	(*d*)421
Other(*b*)	64	49	56	19

(*a*) In addition to the schemes listed below, there was expenditure in 1973–74 on the Commonwealth University Scholarship Scheme ($36,826,000) and the Commonwealth Advanced Education Scholarship Scheme ($5,397,000). No new awards were granted after 1973 under these schemes and from 1974 continuing scholars received assistance under the Tertiary Education Assistance Scheme. (*b*) For this scheme, *number of students* represents students receiving benefits at 30 June each year. (*c*) For this scheme, *number of students* represents students receiving benefits at some time during the year. (*d*) This scheme became the responsibility of the then Department of Labour and Immigration from 1 January 1975. Expenditure shown for 1974–75 is for July–December 1974 only.

Expenditure on education

The statistics in this section are intended to give a broad indication of the extent and direction of both government and private effort in the field of education in recent years. They have been compiled in accordance with national accounting concepts and, apart from some minor revisions which have been incorporated where later information became available, are consistent with the estimates included in *Australian National Accounts: National Income and Expenditure*, 1974–75 (7.1). These figures can therefore be related to other national accounts aggregates. For explanation of the relevant national accounting concepts, reference should be made to *Australian National Accounts*, 1974–75 and also to *Public Authority Finance: Federal Authorities*, 1975–76 (5.12), and *Public Authority Finance: States and Local Authorities*, 1973–74 (5.43), from which figures included in this section have also been taken.

The emphasis given in this section to the outlays of the public sector in part reflects the relative importance of that sector in the provision of education services, but is also a reflection of lack of detailed information relating to educational activities in the private sector. Sufficient information is given, however, to show the order of magnitude of private sector spending, and also to show aggregate demand for education services and facilities.

Total expenditure on education

Total expenditure on education can be measured by adding to the outlay of the public sector the final expenditure on education which the private sector finances from its own resources, or alternatively by adding together the final expenditures of both sectors (i.e. consolidating out the public authority transfers, and also any (net) transactions in existing fixed assets).

The figure derived for total expenditure on education can be regarded as a measure of the aggregate supply of education services and facilities and can therefore be related to the supply of goods and services available from domestic production (i.e. gross domestic product). Final consumption expenditure and capital expenditure on education, by sector, can also be related to the gross domestic product. In addition, total expenditure on education can be related, by financing sector, to the gross domestic product. These relationships are shown in the following table.

AUSTRALIA: EXPENDITURE ON EDUCATION
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75p*
Public sector—					
Final consumption expenditure	1,018	1,213	1,450	1,894	2,766
Expenditure on new fixed assets	246	286	324	378	645
Final expenditure(1)	*1,264*	*1,499*	*1,773*	*2,272*	*3,411*
Transfers to the private sector and expenditure on existing fixed assets (net)	143	170	215	253	317
Outlay	*1,407*	*1,669*	*1,988*	*2,525*	*3,727*
Private sector—					
Final consumption expenditure	171	196	214	208	200
Expenditure on new fixed assets	46	41	38	43	74
Final expenditure(2)	*217*	*237*	*252*	*251*	*274*
Total expenditure on education (1) +(2)	**1,481**	**1,736**	**2,025**	**2,523**	**3,685**
Gross domestic product	**32,928**	**36,725**	**41,852**	**50,694**	**59,551**
Expenditure on education as percentage of Gross domestic product—					
Final consumption expenditure—					
Public	3.1	3.3	3.5	3.7	4.6
Private	0.5	0.5	0.5	0.4	0.3
Expenditure on new fixed assets—					
Public	0.7	0.8	0.8	0.7	1.1
Private	0.1	0.1	0.1	0.1	0.1
Total expenditure	**4.5**	**4.7**	**4.8**	**5.0**	**6.2**

Private sector

Final expenditure on education by the private sector consists of private final consumption expenditure on education services, and expenditure on new fixed assets—mainly by private non-profit organisations, and financed in part by the grant from public authorities for private capital expenditure. These grants are treated as transfers rather than final expenditure of public authorities as with the current grants, and are recorded as a source of funds for capital formation in the national capital account. Private final consumption expenditure on education services is an estimate of fees paid by persons to government schools (mainly technical and agricultural colleges), fees and gifts to universities and school fees (other than boarding fees) paid to non-government schools, business colleges, etc., and is based largely on information relating to fees charged and enrolments at these institutions. Expenditure on such items as school books, uniforms, etc., and expenditure by parents associations on school equipment are included in categories other than education services (such as clothing, etc., newspapers, books, etc., and household durables). Private gross fixed capital expenditure in the field of education is estimated from statistics of the value of work done on new building and major additions to buildings of privateeducational institutions.

Public sector

The statistics which follow form part of a comprehensive statistical program to reclassify the transactions recorded in the 'conventional' accounts of all public authorities into a national accounting presentation. As part of this program, the outlay of public authorities is classified by *function*, so as to reveal the broad purposes for which the public authorities undertake expenditure programs. These statistics relate to those outlays which have been identified as being primarily designed to serve the purposes of 'education', broadly as defined in the United Nations System of National Accounts. Included, therefore, are outlays on administration and regulation of school systems and institutions of higher learning and educational research; on provision, inspection and support of primary and secondary schools, colleges and universities, technical training institutions, schools for the handicapped, adult education facilities, pre-school centres, etc.; on scholarships, etc.; and on subsidiary services such as transportation of school children and fare concessions. Expenditures on school medical and dental services and provision of free milk for school-children are not included, as these are regarded as primarily serving the purpose of health.

Apart from giving emphasis to the broad purposes of public sector outlays, a national accounting presentation of the transactions of public authorities is also designed to facilitate the study of their impact on the rest of the economy. In the following tables the outlays of the public authorities engaged in providing education services or financing their provision by other bodies, public or private, have accordingly been broken into broad categories of final expenditure on goods and services (i.e. final consumption expenditure, and expenditure on new fixed assets); capital financing items (e.g. net expenditure on existing assets); transfers to the private sector (cash benefits, grants for private capital expenditure) which become a source of finance for that sector's own final expenditures; and transfers between public authorities (Commonwealth Government grants to the States).

Detailed analyses have not been prepared of the accounts of all public authorities providing or financing education services but methods of analysis have been adopted which reflect the net effect of the transactions of authorities not fully analysed (such as the State universities). Private non-profit organisations are covered by recording their final consumption expenditure as final expenditure by public authorities and persons: that is, the current grants to these organisations by public authorities are treated as public authorities' final expenditure, and fees, donations, etc. paid to them by persons are included in private final consumption expenditure. Current outlay of non-profit organisations is therefore covered, being approximately equal to their income from grants and fees. For reasons of practicality, grants for capital expenditure by public authorities to private non-profit organisations are treated as transfers, so that the capital expenditure of these organisations is wholly recorded in the private sector.

All public authorities

The outlay on education by all public authorities consists of the final expenditure on goods and services of the Commonwealth Government and State authorities and transfers by these authorities to the private sector. These figures are shown in the following table, and are related to the total outlay (on all functions) by all public authorities in order to give an indication of the share of government resources devoted to education.

ALL PUBLIC AUTHORITIES: OUTLAY ON EDUCATION

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75p*
Federal Authorities—					
Final consumption expenditure	55.3	63.9	80.5	112.5	172.1
Cash benefits to persons	46.4	54.3	73.4	92.8	123.1
Grants for private capital purposes	1.1	1.3	1.3	2.4	7.7
Expenditure on new fixed assets	22.0	25.0	30.1	32.1	45.1
Expenditure on existing fixed assets (net)	−0.5	−0.4	−0.5	−0.5	−0.2
Grants to States—					
Current	100.9	118.9	153.9	433.5	910.7
Capital	74.0	86.0	105.6	189.1	415.5
Grants to local government authorities	..	..	..	0.3	2.4
Total Commonwealth Government	*299.4*	*348.9*	*444.2*	*862.2*	*1,676.4*

ALL PUBLIC AUTHORITIES: OUTLAY ON EDUCATION—*continued*

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75p*
State authorities—					
Final consumption expenditure	961.0	1,147.2	1,367.2	1,778.8	2,590.1
Cash benefits to persons	76.3	96.9	115.6	127.0	138.6
Grants for private capital purposes	10.3	7.7	8.5	13.7	31.4
Expenditure on new fixed assets	223.7	260.6	293.2	345.4	598.7
Expenditure on existing fixed assets (net)	9.7	10.5	16.4	17.2	15.9
Total State	*1,281.0*	*1,522.9*	*1,800.9*	*2,282.2*	*3,374.6*
Less Grants from the Commonwealth Government for educational purposes	175.0	204.9	259.4	622.5	1,326.1
Outlay financed from States' own resources and from non-specific Commonwealth Government grants	1,106.0	1,318.0	1,541.5	1,659.7	2,048.5
Local authorities—					
Final consumption expenditure	1.2	1.6	2.0	2.9	3.9
Expenditure on new fixed assets	0.3	0.4	0.3	0.7	0.8
Total local	*1.5*	*2.1*	*2.3*	*3.6*	*4.7*
Less Grants from Commonwealth Government for education purposes	..	..	..	0.3	2.4
Outlay financed from local authorities own resources	1.5	2.1	2.3	3.3	2.3
Total outlay on education	**1,406.9**	**1,669.0**	**1,998.0**	**2,525.2**	**3,727.2**
Total outlay on all purposes	**10,575.6**	**12,015.9**	**13,379.2**	**16,175.1**	**22,724.4**
	per cent	per cent	per cent	per cent	per cent
Outlay on education as percentage of total outlay	13.3	13.9	14.9	15.6	16.4

Federal Authorities

Details of outlay on education by authorities of the Commonwealth Government are given in the following table.

FEDERAL AUTHORITIES: OUTLAY ON EDUCATION

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75p*
General administration, regulation and research—					
Department of Education—					
Salaries etc., n.e.c.	4.4	5.4	5.8	8.8	12.7
Administration expenses, n.e.c.	2.0	1.7	2.1	3.4	5.5
Building and works, office equipment, etc.	0.2	0.3	5.7	0.2	0.2
Other	0.5	0.9	1.1	2.2	3.0
Total general administration, etc.	*7.1*	*8.4*	*14.7*	*14.5*	*21.4*
Transportation of students—					
School bus service—					
Australian Capital Territory	0.5	0.5	0.6	0.8	0.9
Northern Territory	0.3	0.3	0.4	0.4	0.6
Total transportation	*0.8*	*0.8*	*1.0*	*1.2*	*1.5*

FEDERAL AUTHORITIES: OUTLAY ON EDUCATION—*continued*

($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Primary and secondary education—					
Schools Commission	..	..	..	0.5	2.1
Education services—					
Australian Capital Territory	13.7	15.6	19.8	27.0	45.1
Northern Territory	8.1	12.3	10.0	15.1	20.8
School broadcasts	1.0	1.1	1.2	1.5	1.9
Student assistance	7.0	7.1	8.8	11.9	8.6
Child migrant education program	0.2	0.5	1.1	2.9	3.7
Assistance to isolated children	..	..	2.6	8.2	9.5
Grants to independent schools—					
Australian Capital Territory	1.9	2.7	3.0	3.6	7.8
Northern Territory	0.3	0.3	0.4	0.6	1.1
Grants to the States—					
Independent schools	24.3	29.6	41.0	63.4	118.4
Government schools	..	6.7	13.3	66.4	227.3
School libraries	13.3	9.8	9.7	14.2	33.9
Science laboratories	13.1	10.8	10.0	9.8	12.1
Child migrant education	1.7	2.8	3.9	7.0	11.3
Other	..	..	..	7.9	42.2
Other	..	0.1	0.1	0.3	0.3
Total primary and secondary	*84.4*	*99.4*	*125.1*	*240.2*	*546.3*
Vocational Training—					
Canberra School of Music	0.1	0.1	0.2	0.9	1.6
Canberra Technical College	0.9	1.2	1.6	3.3	5.2
Darwin Community College	..	..	2.5	3.3	3.4
Student assistance	1.1	1.0	1.0	0.5	0.1
Grants to the States—					
Technical training facilities	12.5	7.4	13.0	18.4	19.9
Abolition of tuition fees	..	..	..	10.3	24.6
Apprenticeship training	..	..	..	..	0.5
Total vocational training	*14.6*	*9.8*	*18.3*	*36.6*	*55.3*
University education—					
Australian Universities Commission	0.2	0.3	0.3	0.5	0.6
Australian National University	31.4	32.7	38.0	41.9	59.6
Student assistance—					
Undergraduate	22.5	28.7	37.3	29.9	39.4
Postgraduate	5.2	5.9	6.7	7.4	8.1
Grants to Australian National University residential colleges	1.0	0.1	..	0.1	0.1
School of Public Health and Tropical Medicine (Sydney University)	0.9	1.0	0.9	1.3	1.7
Grants to the States—Universities	75.2	90.6	107.3	249.0	444.0
Other	0.5	..	..	..	0.1
Total university	*137.0*	*159.3*	*190.4*	*330.1*	*553.6*
Other higher education—					
Australian Commission on Advanced Education	..	0.1	0.4	0.6	0.8
Canberra College of Advanced Education	4.9	6.1	6.3	10.4	11.5
Australian Film and Television School	..	..	0.2	0.7	3.2
Student assistance	2.8	3.6	6.7	22.3	41 8
Commonwealth Teaching Service scholarships	..	0.1	0.4	0.7	1.1
Grants to the States—					
Colleges of Advanced Education	30.6	34.0	41.2	164.9	349.2
Teacher training colleges	2.5	11.2	16.4		
Pre-school teacher training colleges	0.9	0.6	0.4		
Pre-school teaching scholarships	..	..	0.1		
Total other higher education	*41.7*	*55.7*	*71.9*	*199.6*	*407.4*
Other education programs—					
Aboriginal education—					
Study grants	0.3	0.5	0.6	0.9	1.4
Secondary grants	2.2	2.5	4.3	6.1	7.2
Grants to private non-profit organisations	0.4	0.4	0.5	1.2	3.7
Grants to the States	0.9	1.2	2.9	4.4	4.6
Other	3.5	3.2	6.2	8.2	14.3
Soldiers' children education scheme	3.4	3.6	3.6	3.5	3.7
Migrant education programs	2.0	3.0	3.1	4.3	6.0
Pre-school child care programs—					
Grants to States and local authorities	..	..	..	7.0	40.0
Other	0.9	1.1	1.5	3.3	8.4
Adult education programs	..	..	..	0.2	1.0
Other	0.2	..	..	1.0	0.5
Total other programs	*13.7*	*15.6*	*22.7*	*40.0*	*90.9*
Total outlay on education	**299.9**	**348.9**	**444.2**	**862.2**	**1,676.4**
of which—					
Current outlay	203.6	238.4	309.1	641.1	1,213.8
Capital outlay	95.7	110.5	135.2	222.1	462.6
Total outlay on all purposes	**7,771.9**	**8,629.6**	**9,741.0**	**11,908.9**	**17,364.2**
	per cent	per cent	per cent	per cent	per cent
Outlay on education as a percentage of total outlay	3.9	4.0	4.6	7.2	9.7

As may be seen from the table, Commonwealth Government outlays are directed largely towards financing outlays on education by the States and the private sector. Direct expenditure by the Commonwealth Government relates mainly to the costs of administering its support programs and its own educational research activities, the provision of education services in the internal territories, expenditures of statutory bodies (i.e. the Australian National University, the Canberra College of Advanced Education, and the Australian Broadcasting Commission), expenditure on the education of Aborigines by the Northern Territory administration, and the costs of the child migrant education program.

Outlay on education in the internal territories

As mentioned previously, the Commonwealth Government is responsible for the provision of education services in the Australian Capital Territory and the Northern Territory. Details of Commonwealth Government outlay on education in the Territories are given below; further information may be found in Chapter 30, The Territories of Australia.

FEDERAL AUTHORITIES: OUTLAY ON EDUCATION IN THE INTERNAL TERRITORIES, 1974–75
($'000)

Australian Capital Territory	
Current outlay—	
Government schools—	
Pre-school education and training	1,688
Payment to N.S.W. Department of Education	357
School transport	887
School cleaning	1,763
Fuel, light, power, etc.	425
School supplies and subsidies	636
Textbook allowances to students in secondary schools	156
Repairs and maintenance	743
Incidental and other expenditure	509
Non-government schools assistance—	
Student allowances	3,516
Textbook allowances	53
Library grants and subsidies	20
Interest subsidy	794
Approved capital programs(*a*)	3,430
Educational services—salaries, etc.	25,904
Canberra Technical College	3,718
School of Music	412
Counsellor training program	35
Secondary school bursaries(*b*)	2
Total	*45,048*
Less Fees—technical and other education	136
Total	*44,912*
Canberra College of Advanced Education	8,019
Total current outlay	*52,931*
Capital outlay—	
Government schools and colleges—	
By National Capital Development Commission—	
Pre-schools	698
Primary schools	5,574
Secondary schools	6,567
Canberra Technical College	1,380
Other educational buildings	568
By Department of Works—	
Buildings and works	93
Furniture and fittings	787
Plant and equipment	1,076
Canberra College of Advanced Education	3,514
Total capital outlay	*20,257*
Total outlay(*c*)	**73,188**

Northern Territory	
Current outlay—	
Government schools—	
Pre-school education and training	n.a.
Payment to S.A. Department of Education	494
School transport	566
School cleaning	479
Fuel, light, power, etc.	315
School supplies and subsidies	541
Repairs and maintenance	494
Incidental and other expenditure	1,410
Non-government schools—assistance—	
Approved capital programs(*a*)	522
Interest subsidy	124
Other assistance	451
Educational services—salaries, etc.	14,154
Darwin Community College	2,846
Aboriginal education	10,309
Scholarships, boarding and travelling allowances(*b*)	45
Total	*32,750*
Less Fees—technical and other education	105
Total current outlay	*32,645*
Capital outlay—	
Government schools—	
Buildings and works	5,017
Furniture and fittings	182
Plant and equipment	770
Aboriginal education	6,265
Total capital outlay	*12,235*
Total outlay	**44,880**

(*a*) Grants for private capital purposes. (*b*) Not allocable. Excludes Commonwealth secondary and technical scholarships. (*c*) Excludes the Australian National University. Commonwealth Government payments to the University in 1974–75 amounted to $55,838,000 for current purposes and $2,518,000 for capital purposes.

State and local authorities

The following table shows the outlay on education by State and local authorities, financed from their own resources (including general purpose grants from the Commonwealth Government) and from Commonwealth Government grants for educational purposes.

STATE AND LOCAL AUTHORITIES: OUTLAY ON EDUCATION
($ million)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75p*
Final consumption expenditure					
New South Wales	351.0	408.5	476.7	613.7	900.6
Victoria	286.8	340.2	419.7	537.3	768.9
Queensland	108.8	132.1	166.0	221.2	323.6
South Australia	97.7	121.6	140.2	189.3	270.7
Western Australia	83.4	106.9	119.4	158.8	234.0
Tasmania	34.5	39.5	47.2	61.3	96.2
Total	*962.2*	*1,148.8*	*1,369.2*	*1,781.7*	*2,594.0*
Expenditure on new fixed assets—					
New South Wales	70.1	87.0	88.9	107.8	202.5
Victoria	70.3	75.3	86.9	100.5	168.6
Queensland	28.9	34.9	37.8	48.0	85.8
South Australia	28.0	28.4	38.3	42.2	71.0
Western Australia	18.7	22.8	25.9	32.3	52.6
Tasmania	8.0	12.7	15.8	15.4	19.0
Total	*224.0*	*261.0*	*293.5*	*346.1*	*599.5*
Expenditure on existing fixed assets (net)	9.7	10.5	16.4	17.2	15.9
Cash benefits to persons	76.3	96.9	115.6	127.0	138.6
Grants for private capital purposes	10.3	7.7	8.5	13.7	31.4
Total outlay on education	**1,282.6**	**1,525.0**	**1,803.2**	**2,285.8**	**3,379.3**
of which—					
New South Wales	457.5	541.0	620.1	783.5	1,169.8
Victoria	384.4	447.2	548.1	685.4	994.1
Queensland	154.1	186.1	226.0	296.0	444.7
South Australia	133.2	158.6	188.3	241.7	354.1
Western Australia	107.7	136.1	154.0	198.5	296.9
Tasmania	45.8	55.8	66.7	80.6	119.7

Specific grants to the States for educational purposes

Financial assistance to the States specifically for education purposes constitutes the major item of outlay on education by the Commonwealth Government. The following table summarises the allocation of the various categories of grants to the States for recent years. Subsequent tables show the allocation of these specific purpose grants to individual States for the same period.

GRANTS TO STATES FOR EDUCATIONAL PURPOSES
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
GRANTS FOR CURRENT PURPOSES					
Schools	24,253	29,594	40,979	85,662	234,549
Technical Education	. .	. .	. .	10,268	24,622
Colleges of Advanced Education	15,743	18,372	26,655	124,808	239,249
Universities	58,878	67,596	80,826	200,042	377,990
Aboriginal Advancement	274	347	1,167	2,174	3,367
Child Migrant Education	1,672	2,778	3,956	6,014	9,845
Child care and pre-school education	. .	. .	. .	4,096	20,377
Educational Research	96	236	275	406	658
Total	*100,916*	*118,923*	*153,858*	*433,470*	*910,657*
GRANTS FOR CAPITAL PURPOSES					
Schools	26,319	27,264	33,019	75,976	199,368
Technical Education	12,535	7,411	12,976	18,381	20,375
Colleges of Advanced Education	18,163	27,425	31,390	40,112	109,916
Universities	16,346	23,002	26,464	48,966	65,990
Aboriginal Advancement	672	867	1,720	2,218	1,224
Child Migrant Education	. .	. .	. .	995	1,477
Child care and pre-school education	. .	. .	. .	2,416	17,123
Total	*74,035*	*85,969*	*105,569*	*189,064*	*415,473*
TOTAL GRANTS					
Schools	50,572	56,858	73,998	161,638	433,917
Technical Education	12,535	7,411	12,976	28,649	44,997
Colleges of Advanced Education	33,906	45,797	58,045	164,920	349,165
Universities	75,224	90,598	107,290	249,008	443,980
Aboriginal Advancement	946	1,214	2,887	4,392	4,591
Child Migrant Education	1,672	2,778	3,956	7,009	11,322
Child care and pre-school education	. .	. .	. .	6,512	37,500
Educational Research	96	236	275	406	658
Total	**174,951**	**204,892**	**259,427**	**622,534**	**1,326,130**

TOTAL GRANTS TO STATES FOR SCHOOLS
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	9,017	10,854	15,046	28,147	84,719
Victoria	7,832	9,655	13,337	29,125	72,112
Queensland	3,640	4,472	6,250	13,578	35,604
South Australia	1,526	1,889	2,529	6,464	19,017
Western Australia	1,682	2,064	2,903	6,389	17,184
Tasmania	556	660	914	1,958	5,911
Total	*24,253*	*29,594*	*40,979*	*85,662*	*234,549*
Capital grants—					
New South Wales	10,653	10,018	10,637	30,208	71,708
Victoria	6,745	7,587	9,486	18,011	58,651
Queensland	3,633	3,483	4,366	8,990	27,968
South Australia	2,545	2,629	3,805	9,430	19,160
Western Australia	1,700	2,296	3,017	6,810	15,789
Tasmania	1,043	1,251	1,708	2,527	6,092
Total	*26,319*	*27,264*	*33,019*	*75,976*	*199,368*
Total grants—					
New South Wales	19,670	20,872	25,683	58,355	156,427
Victoria	14,577	17,242	22,823	47,136	130,763
Queensland	7,273	7,955	10,616	22,568	63,572
South Australia	4,071	4,518	6,334	15,894	38,177
Western Australia	3,382	4,360	5,920	13,199	32,973
Tasmania	1,599	1,911	2,622	4,485	12,003
Total	**50,572**	**56,858**	**73,998**	**161,638**	**433,917**

TOTAL GRANTS TO STATES FOR TECHNICAL EDUCATION
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	..	..	..	5,801	10,333
Victoria	..	..	..	1,772	6,794
Queensland	..	..	..	715	2,262
South Australia	..	..	..	889	2,639
Western Australia	..	..	..	974	2,168
Tasmania	..	..	..	117	426
Total	..	..	..	*10,268*	*24,622*
Capital grants—					
New South Wales	4,846	2,416	5,040	6,873	5,859
Victoria	3,912	1,500	3,350	5,500	6,585
Queensland	1,457	1,238	1,910	1,945	4,073
South Australia	1,191	1,130	1,130	2,063	2,800
Western Australia	804	747	1,166	1,311	587
Tasmania	325	380	380	689	471
Total	*12,535*	*7,411*	*12,976*	*18,381*	*20,375*
Total grants—					
New South Wales	4,846	2,416	5,040	12,674	16,192
Victoria	3,912	1,500	3,350	7,272	13,379
Queensland	1,457	1,238	1,910	2,660	6,335
South Australia	1,191	1,130	1,130	2,952	5,439
Western Australia	804	747	1,166	2,285	2,755
Tasmania	325	380	380	806	897
Total	**12,535**	**7,411**	**12,976**	**28,649**	**44,997**

TOTAL GRANTS TO STATES FOR COLLEGES OF ADVANCED EDUCATION AND TEACHERS COLLEGES

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	3,478	3,713	5,525	28,935	62,122
Victoria	6,191	7,341	10,443	46,711	86,119
Queensland	1,567	1,860	2,906	14,438	27,230
South Australia	1,420	1,651	2,638	13,518	24,531
Western Australia	2,333	2,920	4,015	17,247	32,359
Tasmania	754	887	1,128	3,959	6,888
Total	*15,743*	*18,372*	*26,655*	*124,808*	*239,249*
Capital grants—					
New South Wales	4,639	7,381	9,691	7,644	41,197
Victoria	6,153	8,330	9,275	13,680	32,452
Queensland	1,878	3,776	3,806	5,078	13,438
South Australia	2,973	2,872	3,639	6,196	12,579
Western Australia	1,906	3,031	3,554	7,222	7,281
Tasmania	614	2,035	1,425	292	2,969
Total	*18,163*	*27,425*	*31,390*	*40,112*	*109,916*
Total grants—					
New South Wales	8,117	11,094	15,216	36,579	103,319
Victoria	12,344	15,671	19,718	60,391	118,571
Queensland	3,445	5,636	6,712	19,516	40,668
South Australia	4,393	4,523	6,277	19,714	37,110
Western Australia	4,239	5,951	7,569	24,469	39,640
Tasmania	1,368	2,922	2,553	4,251	9,857
Total	**33,906**	**45,797**	**58,045**	**164,920**	**349,165**

TOTAL GRANTS TO STATES FOR UNIVERSITIES

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	23,594	27,223	32,155	79,572	149,997
Victoria	16,238	18,586	21,896	53,468	99,798
Queensland	7,517	8,412	10,664	26,169	49,876
South Australia	5,811	6,676	7,898	19,808	38,067
Western Australia	3,900	4,594	5,683	14,610	27,978
Tasmania	1,818	2,105	2,530	6,415	12,274
Total	*58,878*	*67,596*	*80,826*	*200,042*	*377,990*
Capital grants—					
New South Wales	4,050	9,682	10,522	16,889	22,526
Victoria	5,990	6,669	7,327	14,128	17,330
Queensland	3,124	2,597	2,545	5,624	9,821
South Australia	2,369	1,818	2,697	7,050	7,320
Western Australia	384	1,571	2,531	4,581	7,714
Tasmania	429	665	842	694	1,279
Total	*16,346*	*23,002*	*26,464*	*48,966*	*65,990*
Total grants—					
New South Wales	27,644	36,905	42,677	96,461	172,523
Victoria	22,228	25,255	29,223	67,596	117,128
Queensland	10,641	11,009	13,209	31,793	59,697
South Australia	8,180	8,494	10,595	26,858	45,387
Western Australia	4,284	6,165	8,214	19,191	35,692
Tasmania	2,247	2,770	3,372	7,109	13,553
Total	**75,224**	**90,598**	**107,290**	**249,008**	**443,980**

TOTAL GRANTS TO STATES FOR EDUCATIONAL ADVANCEMENT OF ABORIGINES

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current payments—					
New South Wales	135	184	229	482	546
Victoria	65	83	167	275	262
Queensland	13	..	293	193	361
South Australia	28	49	279	489	614
Western Australia	26	26	193	732	1,582
Tasmania	7	5	6	4	3
Total	*274*	*347*	*1,167*	*2,174*	*3,367*
Capital payments—					
New South Wales	11	20	98	101	..
Victoria	..	..	60	..	67
Queensland	327	441	981	988	249
South Australia	84	116	156	625	108
Western Australia	250	290	425	505	799
Tasmania	..	..	..	..	..
Total	*672*	*867*	*1,720*	*2,218*	*1,224*
Total grants—					
New South Wales	146	204	327	583	546
Victoria	65	83	227	275	329
Queensland	340	441	1,274	1,181	610
South Australia	112	165	435	1,114	722
Western Australia	276	316	618	1,237	2,381
Tasmania	7	5	6	4	3
Total	**946**	**1,214**	**2,887**	**4,392**	**4,591**

TOTAL GRANTS TO STATES FOR CHILD MIGRANT EDUCATION

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	780	1,191	1,521	2,238	3,890
Victoria	667	1,158	1,819	2,732	4,482
Queensland	57	81	98	165	255
South Australia	87	169	326	587	810
Western Australia	62	150	138	157	229
Tasmania	20	28	53	135	179
Total	*1,672*	*2,778*	*3,956*	*6,014*	*9,845*
Capital Grants—					
New South Wales	..	..	..	90	475
Victoria	..	..	..	550	709
Queensland	..	..	..	50	106
South Australia	..	..	..	165	92
Western Australia	..	..	..	100	89
Tasmania	..	..	..	40	6
Total	..	..	..	*995*	*1,477*
Total grants—					
New South Wales	780	1,191	1,521	2,328	4,365
Victoria	667	1,158	1,819	3,282	5,191
Queensland	57	81	98	215	361
South Australia	87	169	326	752	902
Western Australia	62	150	138	257	318
Tasmania	20	28	53	175	185
Total	**1,672**	**2,778**	**3,956**	**7,009**	**11,322**

TOTAL GRANTS TO STATES FOR RECURRENT EXPENDITURE ON EDUCATIONAL RESEARCH

($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Current grants—					
New South Wales	28	81	91	97	145
Victoria	32	81	87	142	187
Queensland	18	59	60	109	219
South Australia	10	8	13	18	60
Western Australia	8	7	17	26	28
Tasmania	..	..	7	14	19
Total	**96**	**236**	**275**	**406**	**658**

TOTAL GRANTS TO STATES(*a*) FOR CHILD CARE AND PRE-SCHOOL EDUCATION

($'000)

	1973–74	*1974–75*
Current grants—		
New South Wales	1,281	5,417
Victoria	1,226	6,660
Queensland	436	1,734
South Australia	690	3,233
Western Australia	385	2,316
Tasmania	78	1,017
Total	*4,096*	*20,377*
Capital grants—		
New South Wales	160	4,819
Victoria	288	2,637
Queensland	1,003	3,806
South Australia	514	2,773
Western Australia	166	1,911
Tasmania	285	1,177
Total	*2,416*	*17,123*
Total grants—		
New South Wales	1,441	10,236
Victoria	1,514	9,297
Queensland	1,439	5,540
South Australia	1,204	6,006
Western Australia	551	4,227
Tasmania	363	2,194
Total	**6,512**	**37,500**

(*a*) There were no grants to the States for this purpose prior to 1973–74.

CHAPTER 20

EMPLOYMENT AND UNEMPLOYMENT

Further detail on subjects dealt with in this chapter is contained in the *Labour Report* (6.7) and other publications of the ABS. For subjects relating to population censuses reference should be made to the series of mimeographed and printed publications listed in the *Publications of the Australian Bureau of Statistics* (1.8). Detailed information on the labour force and on employment and unemployment is contained in mimeographed bulletins *The Labour Force* (6.22, annual and 6.20, quarterly) and *Employment and Unemployment* (6.4, monthly). Current information is also available in the *Monthly Review of Business Statistics* (1.4) and the *Digest of Current Economic Statistics* (1.5). Preliminary estimates of unemployment and of the labour force are issued quarterly in *Unemployment* (6.35) and *The Labour Force* (6.32) respectively, and preliminary employment estimates are issued in a monthly statement *Employed Wage and Salary Earners* (6.12).

THE LABOUR FORCE

This chapter contains a number of series relating to the labour force and its components. The labour force comprises two categories of persons: those who are employed and those who are unemployed. In the first category are included employers, self-employed persons, wage and salary earners, and unpaid helpers. Comprehensive details for each State and Territory and for Australia as a whole in respect of persons in the labour force, classified according to industry, occupation and occupational status (i.e. whether employers, self-employed persons, wage and salary earners or unpaid helpers) and personal characteristics such as age, sex, marital status and birthplace, are obtained only at a general census of population. Information about the labour force questions in the population census of June 1971 and a table showing the industry and occupational status of the labour force are given on this and the following four pages.

In the periods between population censuses, estimates of the labour force for the whole of Australia are obtained through the population survey, which is carried out by means of personal interviews at a sample of households throughout Australia in February, May, August and November each year (*see* pages 689–702). The survey provides, in addition to particulars of the demographic composition of the labour force, broad estimates of occupational status, occupation, industry and hours of work.

Detailed industry estimates for each State and Territory are obtained only in respect of wage and salary earners, through a monthly collection from employers. These estimates, which exclude employees in agriculture and private households employing staff, are based on benchmarks established by analysing data from the 1971 population census and other relevant sources, such as special returns from government bodies and the Bureau's economic censuses and surveys. Further information about estimates of employed wage and salary earners, and in particular the reason for differences between estimates and census data, is given on pages 717–18.

The population census

General

For the 1971 Census of Population and Housing the term 'labour force' is used in place of 'work force' in conformity with the Bureau's quarterly population survey and with international usage.

The labour force is defined as those persons aged 15 years and over who answered 'yes' to any of the following questions on the 1971 Census schedule:

(*a*) Did this person have a full or part-time job, or business or farm of any kind last week?
(*b*) Did this person do any work at all last week for payment or profit?
(*c*) Was this person temporarily laid off by his employer without pay for the WHOLE of last week?
(*d*) Did this person look for work last week?

Thus the labour force comprises those persons who worked, those who had a job from which they were temporarily absent, those who were temporarily laid off without pay for the whole of the reference week and those who did not work, did not have a job and were actively looking for work.

Persons helping but not receiving wages or salary who usually worked less than 15 hours a week are excluded from the labour force. Bonded trainees (including trainee teachers) and cadets engaged in full-time study at educational institutions are also excluded, even though such institutions were conducted by their employer.

The unemployed members of the labour force are those persons who answered 'No' to questions (*a*) and (*b*) and 'Yes' to question (*d*) and those who answered 'Yes' to question (*a*), 'No' to question (*b*) and 'Yes' to question (*c*). Thus the unemployed consist of those who did no work during the reference week *and* either looked for work (having no job) or were temporarily laid off from a job.

This approach conforms closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954 and to the approach used at the 1966 Census.

According to the definition any labour force activity during the previous week, however little, results in the person being counted in the labour force.

Thus many persons whose main activity is not a labour force one (e.g. housewife, full-time student) are drawn into the labour force by virtue of part-time or occasional labour force activity in the previous week. Answers to the questions on usual major activity indicate that there were substantially more of such persons at the Census of 1971 than at the Census of 1966 and that they were predominantly females.

On the other hand, the definition excludes persons who may frequently or usually participate in the labour force but who in the previous week happened to have withdrawn from the labour force. Answers to the question on usual major activity indicate that there were substantially more of such persons at the 1971 Census than at the 1966 Census, especially among males.

A similar definition of the labour force is used in the quarterly population sample survey conducted by the Bureau by the method of personal interview. This survey is used to measure changes in the labour force from quarter to quarter in the intercensal period.

Evidence from post-enumeration surveys and pilot tests indicates that the personal interview approach tends to identify a larger number of persons as in the labour force than does the completion of the census questionnaire by the householder. This tendency has increased between the 1966 and 1971 Censuses.

The above considerations should be borne in mind if comparisons of the total labour force or labour force participation rates are made between the 1966 and 1971 Censuses, or between the 1971 Census and the 1971 labour force quarterly estimates, or if the 1971 Census figures for wage and salary earners are compared with estimates of employed wage and salary earners shown on pages 718–21.

Occupational status, employment status and labour force status

At the 1971 Census the terms *occupational status*, *employment status* and *labour force status* were used, and the relationship between these terms is illustrated by the following classifications.

Occupational status	*Employment status*	*Labour force status*
Employer	Employed	In the labour force
Self-employed		
Employee		
Helper		
Looking for first job	Unemployed	
Other unemployed		
Not in the labour force	Not in the labour force	Not in the labour force

Prior to the 1971 Census unemployed persons were classified according to their last job held. For the 1971 Census however, details of occupation and industry were sought only in respect of *employed* persons.

Occupation

Occupation is defined as the type of work performed by an employed person and should not be confused with the type of productive activity, business or service carried out by the establishment in which a person works, e.g. a carpenter employed by a steel-making establishment would have the occupation of 'carpenter' and industry 'steel manufacture'; an electrician working at an oil refinery would have the occupation of 'electrician' but his industry would be that of 'oil refining' (*see* Industry).

In accordance with the International Standard Classifications of Occupations the structure of the Australian classification used for the 1971 and previous censuses is based primarily on the nature of the work done. The 1971 classification was prepared from the International Standard Classification of Occupations 1958 (revised 1966). The changes in the revised classification were given careful consideration in the preparation of the 1971 Australian classification. A number of new entries have been created to maintain convertibility to the international classification and others created to give more precise codes in certain occupation groups.

Industry

Industry is defined as the branch of productive activity, business or service carried out by the establishment in which a person is employed.

For the 1971 Census the classification of industry was based on the *Australian Standard Industrial Classification Preliminary Edition* (ASIC). For the purposes of the population census an 'undefined' category was added, where appropriate, to individual divisions, subdivisions and groups of the classification to facilitate the coding of imprecise or generalised descriptions of industrial activities on the census schedules.

At the 1966 and previous censuses, industry was determined from the respondent's own stated description of the 'kind of industry, business or service' in which he worked. With the adoption of ASIC for the 1971 Census comparability with previous censuses is greatly impaired, not only because of changes in the classification itself but also because in 1971 the industry coding in general was not determined from the stated description. Instead the name and address of the establishment at which the respondent worked, in general, provided the industry code for employees of that establishment. However, in a number of cases, owing to deficient replies concerning name and address of employer or because the establishment had not been pre-coded for industry, recourse still had to be made in coding to the respondent's own description of the industry in which he worked.

EMPLOYED POPULATION(a), INDUSTRY BY OCCUPATIONAL STATUS AUSTRALIA, CENSUS 30 JUNE 1971

Industry (division)	*Occupational status*					*Proportion of total (per cent)*
	Employer	*Self-employed*	*Employee (on wage or salary)*	*Helper (unpaid)*	*Total*	
MALES						
Agriculture, forestry, fishing, and hunting	52,681	139,286	120,951	5,300	318,218	8.87
Mining	436	1,566	68,349	96	70,447	1.96
Manufacturing	14,818	11,315	876,910	231	903,274	25.19
Electricity, gas and water	36	28	83,685	1	83,750	2.34
Construction	31,074	40,516	320,024	194	391,808	10.92
Wholesale and retail trade	62,243	48,403	489,315	750	600,711	16.75
Transport and storage	10,025	24,111	204,131	132	238,399	6.65
Communication	29	102	78,184	1	78,316	2.18
Finance, insurance, real estate and business services	18,263	12,200	174,766	190	205,419	5.73
Public administration and defence	..	..	214,219	..	214,219	5.97
Community services	11,526	3,350	207,249	1,331	223,456	6.23
Entertainment, recreation, restaurants, hotels and personal services	14,218	11,717	83,231	304	109,470	3.05
Other and not stated	2,443	7,828	137,658	1,110	149,039	4.16
Total males employed	**217,792**	**300,422**	**3,058,672**	**9,640**	**3,586,526**	**100.00**
FEMALES						
Agriculture, forestry, fishing, and hunting	11,888	27,182	19,916	9,203	68,189	4.12
Mining	52	84	5,416	24	5,576	0.34
Manufacturing	3,657	3,846	304,308	533	312,344	18.89
Electricity, gas and water	7	4	7,490	1	7,502	0.45
Construction	2,779	1,564	15,575	503	20,421	1.23
Wholesale and retail trade	24,879	25,954	333,214	3,330	387,377	23.42
Transport and storage	1,413	1,790	29,806	305	33,314	2.01
Communication	17	81	25,068	3	25,169	1.52
Finance, insurance, real estate and business services	2,058	3,733	151,897	311	157,999	9.55
Public administration and defence	..	..	68,933	..	68,933	4.17
Community services	2,014	4,536	330,936	3,707	341,193	20.63
Entertainment, recreation, restaurants, hotels and personal services	10,391	7,110	139,280	1,260	158,041	9.56
Other and not stated	491	1,753	62,459	3,141	67,844	4.10
Total females employed	**59,646**	**77,637**	**1,494,298**	**22,321**	**1,653,902**	**100.00**
PERSONS						
Agriculture, forestry, fishing, and hunting	64,569	166,468	140,867	14,503	386,407	7.37
Mining	488	1,650	73,765	120	76,023	1.45
Manufacturing	18,475	15,161	1,181,218	764	1,215,618	23.20
Electricity, gas and water	43	32	91,175	2	91,252	1.74
Construction	33,853	42,080	335,599	697	412,229	7.87
Wholesale and retail trade	87,122	74,357	822,529	4,080	988,088	18.86
Transport and storage	11,438	25,901	233,937	437	271,713	5.18
Communication	46	183	103,252	4	103,485	1.97
Finance, insurance, real estate and business services	20,321	15,933	326,663	501	363,418	6.93
Public administration and defence	..	..	283,152	..	283,152	5.40
Community services	13,540	7,886	538,185	5,038	564,649	10.77
Entertainment, recreation, restaurants, hotels and personal services	24,609	18,827	222,511	1,564	267,511	5.10
Other and not stated	2,934	9,581	200,117	4,251	216,883	4.14
Total persons employed	**277,438**	**378,059**	**4,552,970**	**31,961**	**5,240,428**	**100.00**

(a) Persons who, during the week prior to the census were unemployed or who were classified as 'not in the labour force' are not included in this table.

EMPLOYED POPULATION(*a*), BY OCCUPATION, AUSTRALIA: CENSUS 30 JUNE 1971

Occupation (major group)	*Males*	*Females*	*Persons*	*Proportion of total (per cent)*
Professional, technical and related workers	309,329	227,179	536,508	10.24
Administrative, executive and managerial workers	306,842	42,032	348,874	6.66
Clerical workers	300,712	529,696	830,408	15.85
Sales workers	217,991	203,895	421,886	8.05
Farmers, fishermen, hunters, timber getters and related workers	341,128	62,778	403,906	7.71
Miners, quarrymen and related workers	33,797	90	33,887	0.65
Workers in transport and communication	251,033	39,757	290,790	5.55
Tradesmen, production-process workers and labourers, n.e.c.	1,456,850	223,841	1,680,691	32.07
Service, sport and recreation workers	144,371	243,191	387,562	7.39
Members of armed services	62,605	2,591	65,196	1.24
Occupation inadequately described or not stated	161,868	78,852	240,720	4.59
Total employed	**3,586,526**	**1,653,902**	**5,240,428**	**100.00**

(*a*) Persons who, during the week prior to the census, were unemployed or who were classified as 'not in the labour force' are not included in this table.

The population survey

The population survey is the general title given to the household sample survey carried out in February, May, August and November of each year in all States and Territories. Emphasis in the survey is placed on the collection of data on demographic and labour force characteristics, the principal survey component being referred to as the labour force survey. The remaining part of the population survey consists of supplementary collections which are carried out from time to time in conjunction with the labour force survey.

The survey is based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc.) and non-private dwellings (hotels, motels, etc.), and covers about two-thirds of one per cent of the population of Australia. The information is obtained each quarter from the occupants of selected dwellings by carefully chosen and specially trained interviewers. The interviews are carried out during a period of four weeks, so that there are four survey weeks in each of the months to which the survey relates. These four survey weeks are chosen so as to fall within the limits of the calendar month or with minimum encroachment into the adjacent months.

A description of the labour force survey and a selection of principal statistics obtained from it are given in this section. Data from supplementary surveys are published in mimeographed bulletins which are available on request. Results of the principal surveys held in the past have been published in earlier issues of the Year Book. Supplementary surveys for which results are contained in this chapter are leavers from schools, universities or other educational institutions, May 1975; multiple jobholding, August 1975; labour force experience during 1975; labour mobility, February 1976; frequency of pay, August 1974; annual leave, August 1974; school leavers, 1970 to 1974, employment status in May 1975 and persons not in the labour force, November 1975. Summaries of results of a survey of income distribution, 1973–74, conducted in November 1974 and of a survey of weekly earnings of employees conducted in August 1975 are shown in Chapter 10, Labour, Wages and Prices. A survey of journey to work and journey to school conducted in August 1974 is referred to in Chapter 12, Transport and Communication. Reference is also made to a survey of chronic illnesses, injuries and impairments conducted in May 1974 in Chapter 14, Public Health.

The labour force survey

The first Australia-wide labour force survey was carried out in February 1964. Estimates are published quarterly in *The Labour Force* (6.20) and in the preliminary statements *The Labour Force* (6.32) and *Unemployment* (6.35). More comprehensive statistics have been published in special bulletins entitled *The Labour Force* (6.22), covering the period 1964 to 1968, and generally single years thereafter.

The survey includes all persons fifteen years of age and over (including full-blood Aborigines), except members of the permanent armed forces and certain diplomatic personnel customarily excluded from census and estimated populations.

The classification used in the survey conforms closely to that recommended by the Eighth International Conference of Labour Statisticians held in Geneva in 1954. In this classification, the labour force category to which an individual is assigned depends on his actual activity (i.e. whether working, looking for work, etc.) during a specified week, known as 'survey week,' which is the week immediately preceding that in which the interview takes place. The interviews are carried out during a period of four weeks, so that there are four survey weeks in each of the months to which the survey relates. These survey weeks generally fall within the limits of the calendar month.

A person's activity during survey week is determined from answers given to a set of questions specially designed for this purpose. The principal categories appearing in the tables in this section are the employed and unemployed, who together constitute the labour force, and the remainder, who are classified as not in the labour force. Definitions of these categories are as follows:

(i) *The labour force* comprises all persons who, during survey week, were employed or unemployed as defined in (ii) and (iii) below.

(ii) *Employed persons* comprise all those who, during survey week,

(*a*) did any work for pay, profit, commission or payment in kind, in a job or business, or on a farm (including employees, employers and self-employed persons), or

(*b*) worked fifteeen hours or more without pay in a family business (or farm), or

(*c*) had a job, business or farm, but were not at work because of illness, accident, leave, holiday, production hold-up due to bad weather, plant breakdown, etc., or because they were on strike.

A person who had a job but was temporarily laid off by his employer for the whole week without pay is excluded, and is classified in the tables as unemployed. A person who did some work during the week, however, before he either lost his job or was laid off, is classified as employed. A person who held more than one job is counted only once, in the job at which he worked most hours during survey week.

Previously, *unemployed persons* comprised all those who, during survey week, did no work at all, and who either,

(*a*) did not have a job or business and were actively looking for full-time or part-time work (including those who stated that they would have looked for work if they had not been temporarily ill or believed no work was available, or had not already made definite arrangements to start work in a new job after survey week); or

(*b*) were laid off from their jobs without pay for the whole week.

(iii) *Unemployed persons*, for May 1976, comprise all those who either,

(*a*) during the survey week did not work and did not have a job, but could have taken one had it been available, and had been looking for full-time or part-time work in the four weeks up to and including the survey week (including persons who would have been prevented from taking a job in the survey week by their own temporary illness or injury, or by their having made arrangements to start after the survey week in a new job in which they would have preferred to start in the survey week); or

(*b*) were waiting to be called back to a job from which they had been temporarily stood down without pay for four weeks or less (including the whole of the survey week).

Estimates for May 1976 on pages 692 to 702 are based on the revised definitions of *unemployed*, *labour force* and *not in labour force*. For further details *see* the May issue of *The Labour Force* (6.20).

(iv) *Persons not in the labour force* are all those who, during survey week, were not in the categories 'employed' or 'unemployed' as defined. This category therefore includes persons without a job, business or farm who were not actively looking for work, and who, during survey week, were either keeping house (unpaid), attending an educational institution (e.g. school or university), retired or voluntarily inactive, permanently unable to work or inmates of institutions. A person who worked less than fifteen hours without pay in a family business during survey week is also classified as not in the labour force.

Figures of total population fifteen years of age and over for each sex are derived from the official population estimates, which in turn are based on results of population censuses. Figures of marital status and all labour force characteristics of these populations are derived from the sample survey data. For this and other reasons, including differences in timing, methods of collection (personal interview in the survey, self-enumeration in the census) and, in some cases, concepts and definitions, the survey estimates of marital status and labour force characteristics may not agree closely with the corresponding census figures.

Reliability of the estimates

Since the estimates which appear in the following tables are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaires and procedures. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample, and not the whole population, was enumerated. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors.

Space does not allow for the separate indication of the standard errors of all estimates in this section. A table of standard errors which is intended to be of general application is therefore given below.

The figures in this table will not give a precise measure of the standard error of a particular estimate since they are averages based on calculations for a limited number of past surveys over a wide range of labour force characteristics. However, they will provide an indication of the magnitude of the standard error of any particular estimate for any particular survey. An example of the use of the table is as follows: if the estimate for Australia obtained from the sample is 100,000 the standard error is 3,000; i.e. there are then about two chances in three that the true figure is within the range 97,000 to 103,000 and about nineteen chances in twenty that this figure is between 94,000 and 106,000.

STANDARD ERRORS OF QUARTERLY ESTIMATES

Size of estimate (persons)	N.S.W. No.	Vic. No.	Qld No.	S.A. No.	W.A. No.	Tas. No.	N.T. No.	A.C.T. No.	Australia No.	Australia Per cent of estimate
1,500 . .						250	300	300		
2,000 . .					400	250	350	350		
2,500 . .				500	450	250	400	400		
3,000 . .			600	500	450	300	400	450		
4,000 . .	900	900	700	500	500	300	450	550	800	20.0
5,000 . .	1,000	1,000	750	550	550	350	500	600	900	18.0
10,000 . .	1,300	1,300	900	800	700	400	650	800	1,200	12.0
20,000 . .	1,600	1,600	1,200	1,100	1,000	400	900	1,050	1,600	8.0
50,000 . .	2,500	2,500	1,500	1,500	1,500	500	1,300	1,500	2,300	4.6
100,000 . .	3,000	3,000	2,000	2,000	2,000	600		2,000	3,000	3.0
200,000 . .	4,000	4,000	2,000	2,000	2,000				4,000	2.0
500,000 . .	5,000	5,000	3,500	3,200	3,000				6,000	1.2
1,000,000 . .	8,000	8,000							8,000	0.8
2,000,000 . .									10,000	0.5

—— Estimates below the levels indicated have not been published—*see* below.

The standard errors of estimates relating to agricultural employment are generally somewhat higher than the standard errors of other estimates of the same magnitude. Estimates for females also tend to have higher standard errors than estimates of equivalent size for males in similar employment categories.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the numerator and the size of the denominator. However, the percent standard error of the estimated percentage will generally be lower than the per cent standard error of the estimate of the numerator. The per cent standard errors of the numerators can be obtained from the table above.

As the standard errors in the table show, the smaller the estimate the higher is the relative standard error. Very small estimates are thus subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In the following tables, estimates less than the lowest levels shown in the above table have not been included. Although figures for these small components can in some cases be derived by subtraction, they should not be regarded as reliable.

The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents. Inaccuracies of this kind are referred to as the *non-sampling error*, and they may occur in any enumeration, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures.

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER(*a*), BY EMPLOYMENT STATUS AUSTRALIA

	Employed(b)			*Unemployed(b)*		*Total labour force(b)*			
May—	*Agri-culture ('000)*	*Other industries ('000)*	*Total ('000)*	*Number ('000)*	*Per cent of labour force*	*Number ('000)*	*Per cent of population(c)*	*Not in labour force(b) ('000)*	*Civilian population aged 15 and over (a) ('000)*
				MALES					
1973	305.1	3,429.2	3,734.3	50.4	1.3	3,784.7	81.9	836.9	4,621.6
1974	305.9	3,499.5	3,805.4	45.2	1.2	3,850.6	81.8	856.6	4,707.2
1975	297.6	3,474.3	3,771.9	124.5	3.2	3,896.3	81.1	910.7	4,807.0
1976(*e*)	284.2	3,543.9	3,828.1	132.4	3.3	3,960.5	81.0	930.1	4,890.6
				MARRIED WOMEN					
1973	54.7	1,103.3	1,157.9	26.1	2.2	1,184.1	37.5	1,976.6	3,160.7
1974	48.9	1,197.5	1,246.5	25.6	2.0	1,272.1	39.5	1,948.7	3,220.8
1975	52.1	1,185.5	1,237.6	51.0	4.0	1,288.6	39.8	1,951.0	3,239.6
1976(*e*)	57.1	1,230.7	1,287.8	50.9	3.8	1,338.8	41.0	1,924.4	3,263.2
				OTHER FEMALES(*d*)					
1973	10.7	672.9	683.5	23.7	3.4	707.3	45.3	852.4	1,559.6
1974	10.9	687.3	698.2	24.5	3.4	722.7	45.6	863.7	1,586.3
1975	10.3	690.8	701.1	54.1	7.2	755.2	45.3	910.5	1,665.6
1976(*e*)	10.6	714.0	724.6	64.2	8.1	788.8	46.0	926.8	1,715.6
				ALL FEMALES					
1973	65.3	1,776.1	1,841.5	49.9	2.6	1,891.4	40.1	2,828.9	4,720.3
1974	59.9	1,884.8	1,944.7	50.1	2.5	1,994.7	41.5	2,812.4	4,807.1
1975	62.4	1,876.3	1,938.7	105.1	5.1	2,043.8	41.7	2,861.5	4,905.3
1976(*e*)	67.8	1,944.7	2,012.5	115.1	5.4	2,127.6	42.7	2,851.2	4,978.8
				PERSONS					
1973	370.4	5,205.4	5,575.8	100.3	1.8	5,676.1	60.8	3,665.8	9,341.9
1974	365.8	5,384.3	5,750.1	95.2	1.6	5,845.3	61.4	3,669.0	9.514.3
1975	360.0	5,350.6	5,710.6	229.6	3.9	5,940.1	61.2	3,772.1	9,712.3
1976(*e*)	352.0	5,488.6	5,840.6	247.6	4.1	6,088.1	61.7	3,781.3	9,869.4

(*a*) For a note on persons excluded *see* explanatory notes on page 689. (*b*) For definitions *see* page 690. (*c*) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group (labour force participation rate). (*d*) Never married, widowed and divorced. (*e*) Revised definition of unemployed, labour force, and not in labour force. *See* page 690.

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER(*a*), BY EMPLOYMENT STATUS MAY 1976

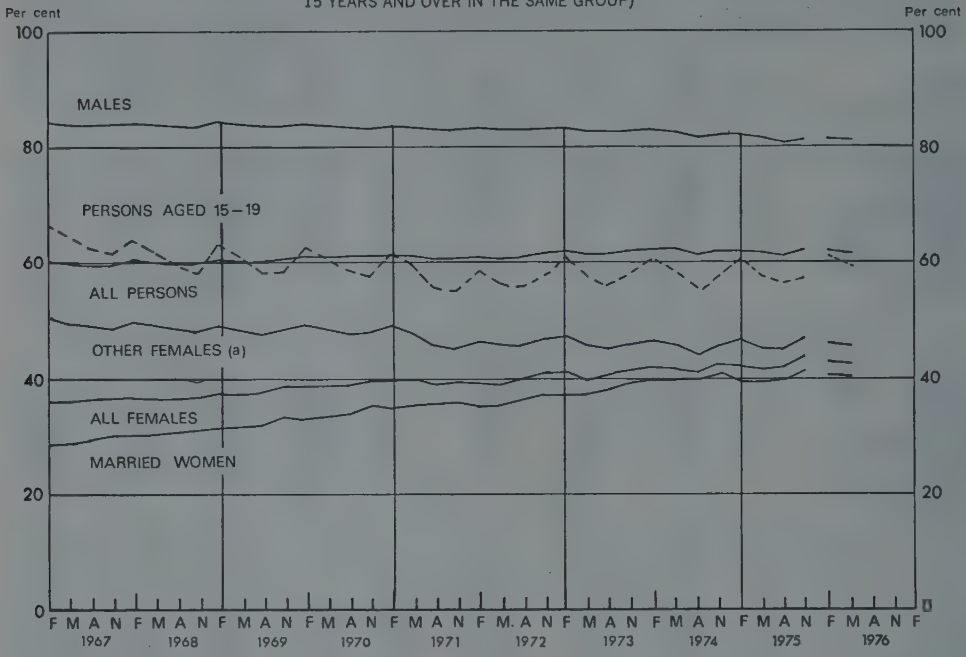
State or Territory	*Employed(b)*			*Unemployed(b)*		*Total labour force(b)*		Not in labour force(b) ('000)	Civilian population aged 15 and over (a) ('000)
	Agri-culture ('000)	Other industries ('000)	Total ('000)	Number ('000)	Per cent of labour force(c)	Number ('000)	Per cent of popu-lation(d)		
				MALES					
New South Wales	84.1	1,278.2	1,362.3	57.9	4.1	1,420.3	81.0	333.4	1,753.7
Victoria	62.9	975.5	1,038.4	(*e*)27.0	(*e*)2.5	1,065.3	81.1	249.1	1,314.4
Queensland	59.0	491.8	550.8	19.5	3.4	570.3	79.4	147.7	718.0
South Australia	32.2	320.7	352.9	10.5	2.9	363.4	80.8	86.6	450.0
Western Australia	34.9	298.4	333.3	10.4	3.0	343.7	83.0	70.3	414.0
Tasmania	9.3	102.2	111.5	3.7	3.2	115.1	79.6	29.5	144.6
Northern Territory	1.5	24.0	25.5	*	*	26.3	81.8	5.8	32.1
Australian Capital Territory	*	53.0	53.4	2.7	4.9	56.1	88.0	7.7	63.8
Australia	**284.2**	**3,543.9**	**3,828.1**	**132.4**	**3.3**	**3,960.5**	**81.0**	**930.1**	**4,890.6**
				FEMALES					
New South Wales	21.0	697.7	718.7	42.3	5.6	761.0	42.5	1,029.0	1,790.0
Victoria	14.4	543.3	557.7	29.0	4.9	586.7	43.2	770.3	1,357.0
Queensland	13.4	248.4	261.8	15.9	5.7	277.7	38.2	449.3	727.0
South Australia	6.7	187.8	194.5	8.2	4.0	202.6	43.8	259.8	462.4
Western Australia	9.1	168.7	177.8	12.5	6.6	190.3	47.3	211.8	402.1
Tasmania	3.1	51.7	54.8	4.7	7.9	59.5	40.4	87.7	147.2
Northern Territory	*	12.7	12.8	*	*	13.3	50.1	13.2	26.5
Australian Capital Territory	*	34.5	34.5	2.1	5.7	36.5	54.9	30.1	66.6
Australia	**67.8**	**1,944.7**	**2,012.5**	**115.1**	**5.4**	**2,127.6**	**42.7**	**2,851.2**	**4,978.8**
				PERSONS					
New South Wales	105.1	1,975.9	2,081.0	100.2	4.6	2,181.2	61.6	1,362.5	3,543.7
Victoria	77.3	1,518.8	1,596.1	(*e*)56.0	(*e*)3.4	1,652.1	61.8	1,019.3	2,671.4
Queensland	72.4	740.2	812.6	35.4	4.2	847.9	58.7	597.1	1,445.0
South Australia	38.9	508.5	547.4	18.7	3.3	566.1	62.0	346.4	912.4
Western Australia	44.0	467.2	511.2	22.9	4 3	534.1	65.4	282.0	816.1
Tasmania	12.3	153.9	166.3	8.3	4.8	174.6	59.8	117.2	291.8
Northern Territory	1.6	36.8	38.3	*	*	39.5	67.5	19.1	58.6
Australian Capital Territory	*	87.5	87.8	4.8	5.2	92.7	71.1	37.7	130.4
Australia	**352.0**	**5,488.6**	**5,840.6**	**247.6**	**4.1**	**6,088.1**	**61.7**	**3,781.3**	**9,869.4**

(*a*) For a note on persons excluded *see* page 689. (*b*) For definitions *see* page 690. (*c*) The number of unemployed in each group as a percentage of the labour force in the same group. (*d*) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group (labour force participation rate). (*e*) This estimate appears low; as pointed out on page 691, there is one chance in twenty that it could be more than two standard errors below the figure which would have been obtained from a complete census.

* Subject to sampling variability too high for most practical uses. For an explanation of the standard error of the estimates *see* page 691.

LABOUR FORCE PARTICIPATION RATES

(THE LABOUR FORCE IN EACH GROUP AS A PERCENTAGE OF THE CIVILIAN POPULATION AGED 15 YEARS AND OVER IN THE SAME GROUP)



(a) Never married, widowed and divorced.

UNEMPLOYMENT RATES

(THE UNEMPLOYED IN EACH GROUP AS A PERCENTAGE OF THE CIVILIAN LABOUR FORCE IN THE SAME GROUP)

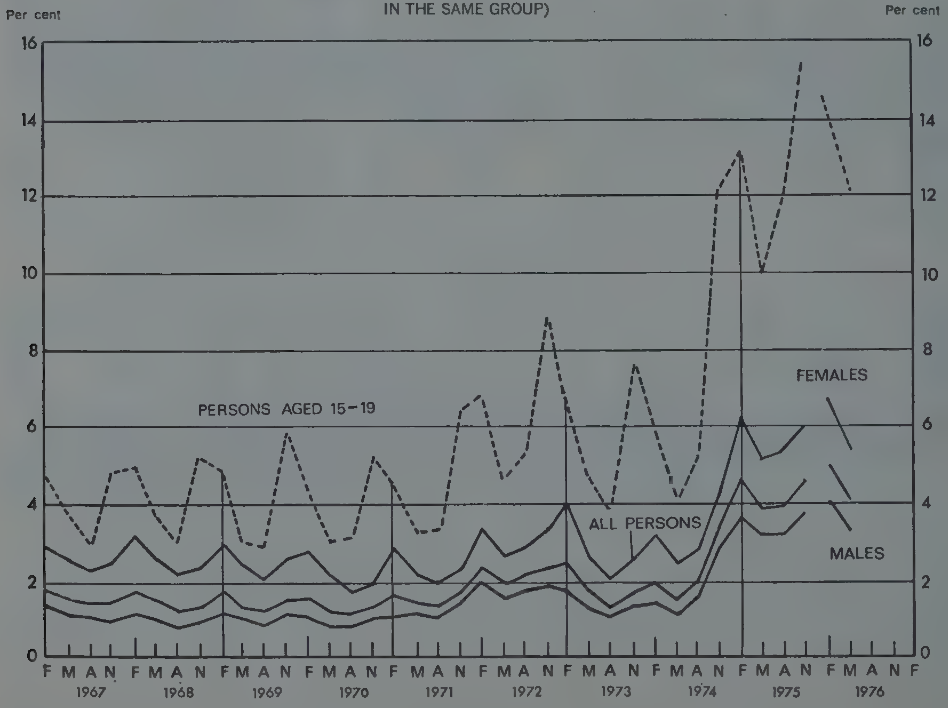


PLATE 46

CIVILIAN LABOUR FORCE(*a*): EMPLOYMENT STATUS, BIRTHPLACE AND PERIOD OF ARRIVAL IN AUSTRALIA, MAY 1976

Birthplace and period of arrival	*Employed(b) ('000)*	*Unemployed(b)*		*Total labour force(b)*	
		Number ('000)	*Per cent of labour force*	*Number ('000)*	*Per cent of population(c)*
MALES					
Born in Australia	2,785.6	96.6	3.4	2,882.2	81.1
Born outside Australia	1,042.5	35.8	3.3	1,078.3	84.1
Arrived before 1955	301.4	6.2	2.0	307.6	71.6
1955 to 1961	232.7	7.2	3.0	239.9	92.1
1962 to 1967	209.0	7.3	3.4	216.4	90.0
1968 to 1974	267.6	13.0	4.6	280.6	90.5
Jan. 1975 to May 1976	31.8	*	*	33.9	80.1
MARRIED WOMEN					
Born in Australia	894.6	31.5	3.4	926.0	38.5
Born outside Australia	393.3	19.5	4.7	412.8	48.6
Arrived before 1955	86.3	*	*	88.9	36.0
1955 to 1961	96.9	4.8	4.7	101.7	51.3
1962 to 1967	86.0	4.0	4.4	90.0	53.5
1968 to 1974	113.4	5.6	4.7	119.0	56.5
Jan. 1975 to May 1976	10.7	*	*	13.2	51.1
ALL FEMALES					
Born in Australia	1,495.0	84.9	5.4	1,579.9	42.1
Born outside Australia	517.5	30.2	5.5	547.7	47.6
Arrived before 1955	107.0	*	*	110.9	31.5
1955 to 1961	122.0	6.8	5.3	128.8	52.1
1962 to 1967	113.9	6.6	5.5	120.4	53.5
1968 to 1974	157.4	9.6	5.7	166.9	58.1
Jan. 1975 to May 1976	17.2	*	*	20.6	52.1
PERSONS					
Born in Australia	4,280.6	181.5	4.1	4,462.1	61.1
Born outside Australia	1,560.0	66.0	4.1	1,626.0	66.8
Arrived before 1955	408.4	10.0	2.4	418.5	53.6
1955 to 1961	354.7	14.1	3.8	368.7	72.6
1962 to 1967	322.9	13.9	4.1	336.8	72.3
1968 to 1974	424.9	22.5	5.0	447.5	74.9
Jan. 1975 to May 1976	49.1	5.5	10.1	54.5	66.6

(*a*) Aged 15 years and over. (*b*) For definitions *see* page 690. (*c*) *See* note (*c*) to table on page 692. Persons in institutions for whom, for the purposes of the survey, the institution was regarded as their usual place of residence, have been omitted since it is not practicable to ascertain the birthplace or the year of arrival in Australia for such persons.

* Estimates less than, or based on a figure less than 4,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can in some cases be derived by subtraction, they should not be regarded as reliable.

CIVILIAN LABOUR FORCE(*a*), BY AGE AND MARITAL STATUS AUSTRALIA, MAY 1976

Age group (years)	*Married*			*Not married(b)*			*Total*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
				NUMBER ('000)					
15–19	6.7	22.7	29.5	378.7	313.9	692.6	385.4	336.6	722.0
20–24	187.6	179.2	366.8	335.3	190.5	525.8	522.9	369.7	892.6
25–34	818.7	378.0	1,196.7	208.9	100.6	309.5	1,027.7	478.6	1,506.2
35–44	686.9	360.5	1,047.4	79.0	53.3	132.3	765.9	413.8	1,179.7
45–54	654.1	300.5	954.6	81.1	65.4	146.5	735.2	365.9	1,101.1
55–59	231.7	65.8	297.6	32.9	28.8	61.7	264.6	94.6	359.3
60–64	157.2	23.8	181.0	25.5	20.4	45.9	182.7	44.2	227.0
65 and over	60.3	8.2	68.5	15.9	15.9	31.7	76.1	24.1	100.2
Total	**2,803.3**	**1,338.8**	**4,142.1**	**1,157.2**	**788.9**	**1,946.1**	**3,960.5**	**2,127.6**	**6,088.1**
				PER CENT OF POPULATION(*c*)					
15–19	90.9	51.0	56.7	61.5	56.6	59.2	61.9	56.2	59.1
20–24	97.4	53.9	69.9	87.6	82.6	85.7	90.9	65.7	78.4
25–34	98.4	42.5	69.5	93.0	77.8	87.5	97.2	47.0	72.6
35–44	98.0	52.9	75.8	91.7	72.2	82.7	97.3	54.8	76.5
45–54	95.7	47.0	72.2	82.6	57.8	69.3	94.1	48.6	71.8
55–59	89.5	28.0	60.2	77.1	37.8	52.0	87.8	30.4	58.6
60–64	68.3	12.3	42.6	60.2	21.4	33.4	67.0	15.3	40.4
65 and over	16.9	3.3	11.3	11.7	3.6	5.5	15.5	3.5	8.5
Total	**85.9**	**41.0**	**63.5**	**71.1**	**46.0**	**58.2**	**81.0**	**42.7**	**61.7**

(*a*) Aged 15 years and over. For definitions *see* page 690. (*b*) Never married, widowed and divorced. (*c*) The labour force in each group as a percentage of the civilian population in the same group (labour force participation rate).

CIVILIAN LABOUR FORCE(*a*), BY INDUSTRY(*b*), AUSTRALIA, MAY 1976
('000)

Industry division or sub-division(b)	*Males*	*Females*	*Persons*
Agriculture	292.5	70.3	362.8
Forestry, fishing and hunting	19.7	*	20.2
Mining	77.5	5.3	82.8
Manufacturing	970.1	347.3	1,317.4
Construction	495.6	37.3	532.9
Wholesale and retail trade	699.1	495.4	1,194.5
Transport and storage	291.7	43.8	335.5
Finance, insurance, real estate and business services	257.1	211.5	468.6
Community services(*c*)	316.3	531.0	847.3
Entertainment, hotels, personal services, etc.	163.1	237.6	400.7
Other industries(*d*)	367.5	131.3	498.8
Looking for first job	10.5	16.2	26.6
Total	3,960.5	2,127.6	6,088.1

(*a*) Aged 15 years and over. For definitions *see* page 690. (*b*) The industry estimates are based on the Australian Standard Industrial Classification (ASIC). (*c*) Comprises health; education, libraries, etc.; welfare and religious institutions; and other community services. (*d*) Comprises electricity, gas and water; communication; and public administration and defence.

* Estimates less than, or based on a figure less than 4,000 are not published because they would be subject to sampling variability too high for most practical purposes. Although figures for these small components can in some cases be derived by subtraction, they should not be regarded as reliable.

CIVILIAN LABOUR FORCE(*a*), BY OCCUPATION, AUSTRALIA, MAY 1976
('000)

Occupation group	*Males*	*Females*	*Persons*
Professional and technical	421.3	323.0	744.3
Administrative, executive and managerial	317.6	39.5	357.2
Clerical	333.2	706.8	1,040.0
Sales	249.8	281.2	530.9
Farmers, fishermen, timber-getters, etc.	348.3	67.4	415.7
Transport and communication	304.1	46.7	350.8
Tradesmen, production-process workers and labourers, n.e.c.(*b*)	1,766.4	263.4	2,029.9
Service, sport and recreation	209.3	383.4	592.8
Looking for first job	10.5	16.2	26.6
Total	**3,960.5**	**2,127.6**	**6,088.1**

(*a*) Aged 15 years and over. For definitions *see* page 690. (*b*) Includes miners, quarrymen and related workers.

AVERAGE HOURS WORKED(*a*) BY EMPLOYED PERSONS(*b*), AUSTRALIA, MAY 1976

Industry division or sub-division(c)	*Males*	*Married women*	*Other females(d)*	*All females*	*Persons*
Agriculture	52.0	27.7	33.5	28.6	47.5
Forestry, fishing and hunting	41.4	*	*	*	40.8
Mining	39.9	*	*	32.9	39.5
Manufacturing	38.4	32.6	36.2	33.5	37.2
Construction	38.9	18.3	35.1	21.2	37.6
Wholesale and retail trade	40.6	28.9	31.0	29.7	36.2
Transport and storage	39.1	26.4	36.8	30.6	38.0
Finance, insurance, real estate and business services	38.7	27.7	34.6	30.9	35.2
Community services(*e*)	34.1	23.3	30.8	26.2	29.2
Entertainment, recreation, restaurants, hotels and personal services	38.8	25.0	29.0	26.4	31.4
Other industries(*g*)	34.8	31.0	34.3	32.6	34.2
Total	**39.3**	**27.4**	**32.3**	**29.2**	**35.8**
Wage and salary earners	37.4	27.1	32.3	29.1	34.4
Other(*f*)	48.8	29.7	34.3	30.3	44.3
Full-time workers	40.5	36.3	36.5	36.4	39.4
Part-time workers	14.2	14.9	13.0	14.5	14.5

(*a*) Persons with jobs who did not work during survey week have been included in the calculation of average hours worked. When recording hours worked, fractions of an hour are disregarded. This procedure results in a slight lowering of the average hours figures. (*b*) Civilians aged 15 years and over. For definition *see* page 690. (*c*) The industry estimates are based on the Australian Standard Industrial Classification (ASIC). (*d*) Never married, widowed and divorced. (*e*) Comprises health; education, libraries, etc.; welfare and religious institutions; and other community services. (*f*) Employers, self-employed and unpaid family helpers. (*g*) Comprises electricity, gas and water; communication; and public administration and defence.

* See note * to the second table on the previous page.

EMPLOYED PERSONS(*a*), BY HOURS WORKED(*b*), AUSTRALIA
('000)

	Hours worked during survey week								*Average hours worked(d)*	
May—	*0(c)*	*1–29*	*30–34*	*35–39*	*40*	*41–48*	*49 and over*	*Total*	*Full-time workers (e)*	*All persons*
					MALES					
1973	237.5	175.2	178.4	332.3	1,471.0	534.7	805.1	3 734.3	41.9	40.9
1974	261.3	196.7	140.7	351.1	1,426.5	585.8	843.4	3,805.4	41.7	40.7
1975	270.3	208.6	161.3	369.4	1,551.7	469.6	740.9	3,771.9	40.8	39.8
1976	299.1	225.6	154.7	395.4	1,529.5	507.9	715.9	3,828.1	40.5	39.3
					MARRIED WOMEN					
1973	104.0	344.9	87.7	143.7	364.5	54.9	58.2	1,157.9	37.3	29.4
1974	113.5	372.2	93.3	158.1	373.1	71.8	64.6	1,246.5	37.4	29.5
1975	133.2	379.3	93.7	164.3	361.7	48.8	56.6	1,237.6	36.4	28.2
1976	149.0	422.1	97.2	159.7	350.0	50.5	59.2	1,287.8	36.3	27.4
					OTHER FEMALES(*f*)					
1973	46.2	82.4	41.0	144.2	296.2	44.9	28.6	683.5	36.7	33.9
1974	47.9	92.3	38.2	145.7	290.8	52.5	30.7	698.2	37.0	33.6
1975	45.0	98.7	37.8	152.9	289.3	49.5	27.8	701.1	37.1	33.4
1976	58.6	114.6	39.9	152.2	283.0	45.1	31.1	724.6	36.5	32.3
					ALL FEMALES					
1973	150.3	427.2	128.8	287.9	660.7	99.8	86.8	1,841.5	37.0	31.1
1974	161.4	464.5	131.4	303.9	663.9	124.3	95.3	1,944.7	37.2	31.0
1975	178.2	478.0	131.5	317.2	651.1	98.3	84.4	1,938.7	36.7	30.1
1976	207.7	536.7	137.1	311.9	633.1	95.7	90.3	2,012.5	36.4	29.2
					PERSONS					
1973	387.8	602.5	307.2	620.2	2,131.7	634.5	891.9	5,575.8	40.6	37.7
1974	422.7	661.2	272.1	654.9	2,090.4	710.1	938.6	5,750.1	40.4	37.4
1975	448.5	686.5	292.9	686.6	2,202.8	567.8	825.4	5,710.6	39.7	36.5
1976	506.8	762.3	291.8	707.3	2,162.6	603.5	806.3	5,840.6	39.4	35.8

(*a*) Civilians 15 years of age and over. For definitions *see* page 690. (*b*) Actual hours worked during survey week, not hours paid for. The figures may be affected by public holidays, leave, absenteeism; temporary absence from work due to sickness, accidents, and industrial disputes; and work stoppages due to bad weather, plant breakdown, etc. (c) Excludes persons laid off for the whole of survey week without pay; these persons are classified as unemployed. (*d*) Persons with jobs who did not work during survey week have been included in the calculation of average hours worked. When recording hours worked, fractions of an hour are disregarded. This procedure results in a slight lowering of the average hours figures. (*e*) Persons who usually work 35 hours a week or more and others who, although usually part-time workers, worked 35 hours or more during survey week. (*f*) Never married, widowed and divorced.

EMPLOYED PERSONS(*a*) WHO WORKED LESS THAN 35 HOURS(*b*), BY REASON, AUSTRALIA

('000)

	Usually work 35 hours or more				*Usually work less than 35 hours*		
	Reason for working less than 35 hours				*Reason for working less than 35 hours*		
May—	*Leave or holiday*	*Own illness or injury*	*Other reasons*	*Total*	*Lack of work*	*Other reasons*	*Total*
				MALES			
1973 . . .	333.2	95.1	33.8	462.1	10.2	118.9	129.1
1974 . . .	287.6	116.1	60.4	464.0	5.7	128.9	134.6
1975 . . .	323.2	107.8	66.4	497.4	15.3	127.5	142.9
1976 . . .	349.7	121.6	35.0	506.3	21.8	151.4	173.2
				FEMALES			
1973 . . .	160.8	33.5	7.7	202.0	18.7	485.5	504.2
1974 . . .	132.2	50.6	14.2	197.1	12.9	547.4	560.3
1975 . . .	146.6	37.9	14.4	198.8	27.2	561.7	588.9
1976 . . .	162.4	44.1	12.3	218.8	36.4	626.4	662.8
				PERSONS			
1973 . . .	494.0	128.6	41.5	664.1	28.9	604.4	633.3
1974 . . .	419.8	166.7	74.6	661.1	18.6	676.3	694.9
1975 . . .	469.7	145.7	80.8	696.2	42.5	689.2	731.8
1976 . . .	512.1	165.7	47.3	725.0	58.2	777.7	836.0

(*a*) Civilians 15 years of age and over. For definitions *see* page 690. (*b*) *See* note (*b*) to previous table.

UNEMPLOYMENT RATES(*a*), STATE CAPITAL CITIES AND OTHER AREAS
(Per cent)

	State capital cities(b)			*Other areas*		
May—	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
1973	1.2	2.1	1.6	1.5	3.6	2.1
1974	1.0	1.9	1.3	1.5	3.9	2.2
1975	3.4	5.1	4.0	2.9	5.3	3.6
1976(*c*)	3.3	5.1	3.9	3.5	6.2	4.3

(*a*) The unemployed in each group as a percentage of the labour force in the same group. (*b*) The figures relate to persons residing within the boundaries of the relevant Statistical Divisions. Explanatory notes on the delimitation of urban boundaries are shown on pages 142–3. Maps showing the boundaries of the capital city Statistical Divisions were published in *Census of the Commonwealth of Australia, 30 June 1966—Field Count Statement No. 4*, and *Census of Population and Housing, 30 June 1971—Field Count Statement Nos 3 to 8*. (*c*) Based on revised definition of unemployed. *See* page 690.

UNEMPLOYED PERSONS(*a*), AUSTRALIA

	Age (years)				*Duration of unemployment(b)*				*Looking for—*		
	15–19		*20 and over*								
May—	*Number unemployed ('000)*	*Per cent of labour force*	*Number unemployed ('000)*	*Per cent of labour force*	*Under 2 weeks ('000)*	*2 and under 4 weeks ('000)*	*4 and under 13 weeks ('000)*	*13 weeks and over ('000)*	*Full-time work(c) ('000)*	*Part-time work(d) ('000)*	*Total ('000)*
					MALES						
1973	14.7	4.2	35.7	1.0	9.3	15.7	16.0	9.3	44.9	5.5	50.4
1974	10.4	2.9	34.8	1.0	8.7	15.8	14.1	6.6	40.8	4.3	45.2
1975	30.8	8.5	93.7	2.7	12.1	21.4	48.4	42.6	117.4	7.1	124.5
1976(*e*)	41.7	10.8	90.7	2.5	9.0	22.4	38.3	62.7	123.3	9.2	132.4
					FEMALES						
1973	16.5	5.3	33.4	2.1	11.3	13.8	15.1	9.7	33.4	16.5	49.9
1974	18.2	5.6	31.9	1.9	14.2	12.9	15.8	7.2	30.9	19.2	50.1
1975	38.7	11.7	66.4	3.9	13.6	17.8	36.5	37.3	74.1	31.0	105.1
1976(*e*)	45.7	13.6	69.4	3.9	9.5	20.7	39.2	45.6	79.1	36.0	115.1
					PERSONS						
1973	31.2	4.7	69.1	1.4	20.6	29.5	31.2	19.0	78.3	22.0	100.3
1974	28.6	4.2	66.7	1.3	23.0	28.6	29.9	13.7	71.7	23.5	95.2
1975	69.5	10.0	160.1	3.1	25.7	39.2	84.9	79.8	191.5	38.1	229.6
1976(*e*)	87.4	12.1	160.1	3.0	18.5	43.1	77.6	108.3	202.4	45.2	247.6

(*a*) Civilians 15 years of age and over. For definitions *see* page 690. (*b*) Period from the time the person began looking for work, or was laid off, to the end of survey week. (*c*) Includes persons laid off for the whole week from full-time jobs. (*d*) Includes persons laid off for the whole week from part-time jobs. (*e*) Revised definition of unemployed. *See* page 690.

UNEMPLOYED PERSONS(*a*), BY AVERAGE DURATION OF UNEMPLOYMENT(*b*), AUSTRALIA, MAY 1976

(Weeks)

Age	*Males*	*Married women*	*Other females(c)*	*All females*	*Persons*
15–19 years	15.6	14.4	18.6	18.4	17.1
20 years and over	19.4	14.6	19.0	15.9	17.9
All unemployed persons	**18.2**	**14.6**	**18.8**	**16.9**	**17.6**

(*a*) Civilians aged 15 years and over. For definition *see* page 690. (*b*) Periods of unemployment are recorded only in completed weeks; this procedure results in a slight lowering of the figures shown for average duration of unemployment. (*c*) Never married, widowed and divorced.

UNEMPLOYED PERSONS(*a*), BY AGE AND BIRTHPLACE, AUSTRALIA, MAY 1976

Age group (years)	*Number unemployed ('000)*			*Per cent of labour force*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
BORN IN AUSTRALIA						
15–19	36.0	39.2	75.2	10.7	13.5	12.0
20 and over—						
20–24	20.6	16.6	37.2	4.8	5.5	5.1
25–34	16.8	13.8	30.7	2.3	4.2	2.9
35 and over	23.2	15.3	38.5	1.7	2.3	1.9
Total 20 and over	*60.6*	*45.7*	*106.3*	*2.4*	*3.5*	*2.8*
Total	**96.6**	**84.9**	**181.5**	**3.4**	**5.4**	**4.1**
BORN OUTSIDE AUSTRALIA						
15–19	5.7	6.5	12.2	12.0	14.3	13.1
20 and over—						
20–24	6.0	5.2	11.2	6.2	7.5	6.7
25–34	8.9	6.6	15.5	2.9	4.5	3.4
35 and over	15.2	11.8	27.0	2.4	4.2	3.0
Total 20 and over	*30.1*	*23.7*	*53.8*	*2.9*	*4.7*	*3.5*
Total	**35.8**	**30.2**	**66.0**	**3.3**	**5.5**	**4.1**

(*a*) Civilians aged 15 years and over. For definition *see* page 690.

PERSONS NOT IN THE LABOUR FORCE, BY MAJOR ACTIVITY, AUSTRALIA ('000)

May—	*Kept house*	*Went to school, etc.*	*Retired or voluntarily inactive*	*Permanently unable to work*	*Institutionalised (a)*	*Total*
MALES						
1973	9.5	271.4	458.7	41.0	56.4	836.9
1974	8.2	268.8	476.5	50.7	52.4	856.6
1975	8.5	277.3	525.2	43.6	56.1	910.7
1976(*c*)	12.5	269.2	548.5	44.0	55.9	930.1
MARRIED WOMEN						
1973	1,930.3	5.4	25.2	5.9	9.8	1,976.6
1974	1,901.0	8.3	26.5	4.8	8.1	1,948.7
1975	1,893.5	9.8	29.8	5.0	12.8	1,951.0
1976(*c*)	1,867.1	12.2	30.9	5.3	8.8	1,924.4
OTHER FEMALES(*b*)						
1973	439.3	225.1	112.9	18.2	56.8	852.4
1974	442.4	220.7	118.6	19.9	62.1	863.7
1975	451.5	239.9	130.8	17.0	71.2	910.5
1976(*c*)	492.3	246.6	108.1	13.8	65.9	926.8
ALL FEMALES						
1973	2,369.6	230.6	138.2	24.1	66.6	2,828.9
1974	2,343.4	228.9	145.1	24.7	70.2	2,812.4
1975	2,345.1	249.6	160.6	22.1	84.1	2,861.5
1976(*c*)	2,359.4	258.8	139.1	19.2	74.7	2,851.2
PERSONS						
1973	2,379.1	502.0	596.8	65.0	122.9	3,665.8
1974	2,351.6	497.7	621.7	75.5	122.6	3,669.0
1975	2,353.6	526.9	685.8	65.6	140.1	3,772.1
1976(*c*)	2,371.9	528.0	687.5	63.2	130.6	3,781.3

(*a*) Comprises inmates of gaols, patients in hospitals, sanatoria, etc., for whom, for the purposes of the survey, the institution was regarded as their dwelling. (*b*) Never married, widowed and divorced. (*c*) Revised definition of not in labour force. *See* page 690.

Leavers from schools, universities or other educational institutions

Surveys based on the quarterly population survey (*see* page 689) were carried out in February each year for the period 1964 to 1974 and in May 1975 in order to obtain information about persons aged 15 to 24 who had attended full time at a school, university or other educational institution at some time during the previous year. Estimates for the years 1964 to 1974 have been published in previous issues of the Year Book.

In 1975, the questions asked differed from those in other surveys in this series. In addition to information on leavers from educational institutions, the survey in May 1975 obtained information about a number of other aspects of education.

The information about the type of courses attended in 1975 related to courses actually attended at the time of the survey. In earlier surveys conducted in February (before the commencement of the academic year for some institutions) the information was of necessity partly a reflection of expectations.

For the May 1975 survey, *leavers from schools, universities or other educational institutions* were defined as persons who, at the time of the survey, were not attending an educational institution full-time in a course normally lasting at least one academic year, and who had completed or withdrawn from such a course at an Australian educational institution in 1974 or 1975. *Non-leavers* were defined as persons who, at the time of the survey, were attending an Australian educational institution full time in a course normally lasting at least one academic year and who had done so in 1974.

For surveys prior to 1975, *leavers from schools, universities or other educational institutions* were defined as persons who had attended an educational institution full time in the previous year, and who had not returned, or did not intend to return, to full-time education in the current year. *Non-leavers* were defined as those who were continuing their full-time education in the current year.

The estimates relate to all persons in the age group 15 to 24 years, except members of the permanent armed forces and certain diplomatic personnel customarily excluded from census and estimated populations. Certain categories of persons covered by the survey were not asked the survey questions. These comprised persons who were patients in hospitals and sanitoria, or inmates of gaols, reformatories, etc., and for whom, for the purposes of this survey, the institution was regarded as their dwelling, and persons reported as permanently unable to work. An estimate of the total number of such persons is shown in the first table in this section.

For further details reference should be made to the periodic bulletins *Survey of Leavers from Schools, Universities or Other Educational Institutions* (6.9).

CIVILIANS AGED 15 TO 24 YEARS(*a*), BY ATTENDANCE OR NON-ATTENDANCE FULL TIME AT A SCHOOL, UNIVERSITY, ETC., IN THE PREVIOUS YEAR AUSTRALIA, MAY 1975

('000)

	Males	*Females*	*Persons*
Attended school, university, etc., full time in previous year(*b*)—			
Returned to full-time education	316.0	283.6	599.6
Did not return to full-time education ('leavers')	123.1	115.3	238.4
Total	**439.2**	**398.9**	**838.1**
Did not attend school, university, etc., full time in previous year(*b*)	726.0	748.0	1,474.0
In hospitals, etc.(*c*)	12.5	4.3	16.8
Total persons aged 15 to 24 years	**1,177.7**	**1,151.2**	**2,328.9**

(*a*) At the time of the survey. (*b*) Excludes some patients in hospitals and sanatoria and some inmates of gaols, reformatories, etc., at the time of the survey, and persons permanently unable to work. (*c*) Estimated numbers of persons within the scope of the survey for whom the hospital, sanatorium, gaol, reformatory, etc., was regarded as their dwelling, and persons who were reported as permanently unable to work. Particulars of attendance at schools, etc., were not obtained in respect of such persons.

NOTE. Definitions used in this survey differ from those used in other surveys in this series. *See* text above.

'LEAVERS'(*a*), BY STATE AND TERRITORY, AUSTRALIA, MAY 1975
('000)

	Persons aged 15–19 years			*Persons aged 15–24 years*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
New South Wales	34.6	37.3	71.8	44.0	42.6	86.6
Victoria	23.3	24.8	48.2	29.5	28.5	58.0
Queensland	17.3	14.8	32.1	19.1	16.4	35.5
South Australia	11.2	10.0	21.1	13.1	11.7	24.9
Western Australia	9.0	8.8	17.8	11.4	10.8	22.1
Tasmania	2.9	3.3	6.3	3.5	3.7	7.2
Australian Capital Territory	*	*	2.4	1.7	*	2.9
Australia(*b*)	**100.2**	**100.7**	**200.8**	**123.1**	**115.3**	**238.4**

(*a*) Persons aged 15 to 24 years inclusive at the time of the survey. For definition *see* page 703. *See also* NOTE to previous table. (*b*) Includes the Northern Territory.

* Estimates are not published as they would be subject to sampling variability too high for practical purposes. Although figures for these small components can be derived by subtraction they should not be regarded as reliable.

'LEAVERS'(*a*) BY AGE, AUSTRALIA, MAY 1975
('000)

	Age (years)						
	15	*16*	*17*	*18*	*19*	*20 and over*	*Total*
Attended school in 1974—							
Males	20.7	36.1	23.7	13.4	4.0	*	100.6
Females	18.4	34.5	22.3	12.9	*	*	90.5
Persons	**39.1**	**70.5**	**46.0**	**26.2**	**5.8**	*	**191.1**
Attended any educational institution(*b*) in 1974—							
Males	20.7	36.1	24.3	14.4	6.1	21.7	123.1
Females	18.4	35.4	27.4	15.5	4.6	14.0	115.3
Persons	**39.1**	**71.4**	**51.7**	**29.9**	**10.7**	**35.6**	**238.4**

(*a*) *See* note (*a*) to previous table. (*b*) Includes school.

* *See* note * to previous table.

PERSONS AGED 15 TO 24 YEARS IN FEBRUARY WHO ATTENDED FULL TIME AT A SCHOOL, UNIVERSITY, ETC., IN THE PREVIOUS YEAR, BY TYPE OF INSTITUTION ATTENDED AND WHETHER OR NOT RETURNED TO FULL TIME EDUCATION MAY 1975, AUSTRALIA

('000)

	Institution attended full time in previous year					
	School	*University*	*College of advanced education (b)*	*Technical college*	*Other*	*Total*
Males—						
Returned to full-time education in 1975(*a*)—						
At same type of institution .	229.4	37.7	18.3	*	*	289.4
At different type of institution	25.7	*	*	*	*	26.7
Total	255.0	38.0	18.3	*	*	316.0
Did not return to full-time education in 1975 ('leavers')(*a*) .	100.6	9.5	7.3	5.2	*	123.1
Total males	*355.6*	*47.4*	*25.5*	*9.0*	*	*439.2*
Females—						
Returned to full-time education in 1975(*a*)—						
At same type of institution .	200.6	20.7	25.7	*	*	249.8
At different type of institution	32.4	*	*	*	*	33.8
Total	233.0	21.6	25.7	*	*	283.6
Did not return to full-time education in 1975 ('leavers')(*a*) .	90.5	5.0	8.9	7.5	*	115.3
Total females	*323.5*	*26.6*	*34.6*	*10.2*	*4.0*	*398.9*
Persons—						
Returned to full-time education in 1975(*a*)—						
At same type of institution .	430.0	58.3	44.0	5.3	*	539.2
At different type of institution	58.1	*	*	*	*	60.5
Total	488.0	59.5	44.0	6.4	*	599.6
Did not return to full-time education in 1975 ('leavers')(*a*) .	191.1	14.5	16.1	12.8	4.0	238.4
Total persons	**679.1**	**74.0**	**60.1**	**19.2**	**5.6**	**838.1**

(*a*) Definitions used in this survey differ from those used in other surveys in this series. *See* text on page 703. (*b*) Includes teachers colleges.

* *See* note * to first table on previous page.

Multiple jobholding

In August 1975 a survey, based on the quarterly population survey (*see* page 689), was conducted throughout Australia to obtain information about the nature and extent of multiple jobholding. The results of earlier surveys of multiple jobholding were given in Year Book No. 54, pages 1162–6 (August 1966 and 1967), Year Book No. 58, pages 707–10 (May 1971), and Year Book No. 60, pages 708–9 (August 1973).

In these surveys persons were classified as *multiple jobholders* if, during the survey week, they:

(*a*) worked in a second job or held a second job from which they were temporarily absent, and

(*b*) were employed in at least one of their jobs as a wage or salary earner. Work as an unpaid family helper or service in the reserve defence forces was not regarded as a second job. Persons who by nature of their employment worked for more than one employer, e.g. domestics, odd-job men, baby-sitters, etc., were not counted as multiple jobholders unless they also held another job of a different kind; nor were those who worked for more than one employer solely by reason of changing jobs during the survey week.

The table of standard errors and the comments on the reliability of estimates given on pages 691–2 are also applicable to this survey.

Further details of the survey were published in *Multiple Jobholding*, August 1975 (6.10).

MULTIPLE JOBHOLDERS, AUGUST 1975(*a*)

	Number ('000)			*Per cent of labour force*(*b*)		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
Total(*c*)	**151.9**	**45.2**	**197.1**	**3.9**	**2.2**	**3.3**
New South Wales	45.8	13.1	58.9	3.3	1.8	2.8
Victoria	45.5	11.4	56.9	4.3	2.0	3.5
Queensland	17.4	6.8	24.2	3.1	2.5	2.9
South Australia	17.3	6.8	24.1	4.8	3.5	4.4
Western Australia	17.8	5.0	22.8	5.4	2.9	4.5
Tasmania	5.2	1.5	6.7	4.5	2.7	3.9
Australian Capital Territory	2.7	*	3.1	5.1	*	3.5
Capital cities (*d*)	86.2	31.6	117.8	3.6	2.2	3.1
Other areas	65.7	13.6	79.3	4.5	2.1	3.8
Married	120.0	28.0	148.0	4.3	2.2	3.6
Not married(*e*)	31.9	17.1	49.1	2.9	2.3	2.6
Age (years)—						
15–19	8.6	5.5	14.1	2.4	1.7	2.1
20–24	23.7	8.0	31.7	4.7	2.2	3.7
25–34	52.7	12.9	65.6	5.3	2.8	4.5
35–44	33.1	9.5	42.6	4.4	2.4	3.7
45–54	25.7	6.1	31.7	3.5	1.8	3.0
55 and over	8.2	*	11.3	1.5	*	1.6
Born in Australia	123.2	35.0	158.2	4.4	2.3	3.6
Born outside Australia	28.7	10.3	38.9	2.7	1.9	2.5
United Kingdom and Ireland	13.9	4.8	18.7	3.6	2.4	3.2
Other countries	14.9	5.4	20.2	2.3	1.6	2.0
Arrived in Australia						
Before 1955	7.7	*	9.9	2.4	*	2.3
1955–1961	7.2	*	9.4	3.1	*	2.7
1962–1967	6.2	*	8.7	3.0	*	2.7
1968-August 1975	7.7	*	10.9	2.6	*	2.3
Occupation of main job—						
Professional and technical	26.6	8.6	35.1	6.7	2.9	5.1
Administrative, executive and managerial	10.9	*	11.9	3.4	*	3.3
Clerical	15.5	17.5	33.1	4.9	2.5	3.3
Sales	11.8	5.7	17.5	5.0	2.2	3.5
Farmers, fishermen, timber-getters, etc.	17.4	*	19.5	4.9	*	4.6
Transport and communication	10.7	*	11.2	3.5	*	3.2
Tradesmen, production-process workers, etc. (*f*)	50.3	*	51.6	2.9	*	2.6
Service, sport and recreation	8.8	8.4	17.2	4.4	2.3	3.0
Occupation of second job—						
Professional and technical	27.6	9.6	37.2			
Administrative, executive and managerial	*	*	*			
Clerical	7.3	10.6	17.9			
Sales	12.9	5.9	18.7			
Farmers, fishermen, timber-getters, etc.	30.3	*	32.7			
Transport and communication	8.6	*	9.7			
Tradesmen, production-process workers, etc.(*f*)	27.8	*	29.1			
Service, sport and recreation	34.1	14.0	48.1			

(*a*) Non-institutional civilians aged 15 years and over. (*b*) Multiple jobholders in each group as a percentage of the labour force in the same group. (*c*) Includes the Northern Territory. (*d*) Statistical Divisions of the six State capital cities as defined in Census of Population and Housing, 30 June 1971, *see* pages 142–3. (*e*) Never married, widowed and divorced. (*f*) Includes miners, quarrymen and related workers.

* Subject to sampling variability too high for most practical purposes. Although figures for some of these small components can be derived by subtraction, they should not be regarded as reliable.

Labour force experience

In February 1975 and 1976 surveys based on the quarterly population survey (*see* page 689) were conducted throughout Australia to obtain information about the labour force experience during the previous year of civilians aged fifteen years and over. Information obtained included the length of time (in the previous year) during which persons were employed, unemployed or not in the labour force, the number of times they were unemployed and other aspects of labour force experience. The results of earlier surveys of labour force experience, conducted in February 1969 and 1973 were given in Year Book No. 57, pages 695–700 and Year Book No. 60, pages 710–1, respectively.

A summary of the results of the survey conducted in February 1976 is shown below. The results of the survey conducted in February 1975 were published in *Labour Force Experience During 1974*, February 1975 (6.26).

Each person was assigned to a labour force category for each week in 1975, on the basis of his actual activity (i.e. whether working, looking for work, etc.) during that week. The principal categories appearing in the tables are as follows:

(i) *Persons in the labour force*. A person was classified as having been in the labour force during any week in which he was employed or unemployed as defined in (ii) and (iii) below.

(ii) *Employed person*. A person was classified as having been employed during a week if, in that week, he: (*a*) did any work for pay, profit, commission or payment in kind, in a job or business, or on a farm (including employees, employers and self-employed persons), or (*b*) worked fifteen hours or more without pay in a family business (or farm), or (*c*) had a job, business or farm, but was on paid leave (including sick leave).

(iii) *Unemployed persons*. A person was classified as having been unemployed during a week if, in that week, he did not work at all, and either: (*a*) did not have a job or business and was looking for work, or (*b*) was laid off from his job without pay for the whole week.

(iv) *Persons out of the labour force* are all those who, in any week, were not in the categories "employed" or "unemployed", as defined above. For the purposes of this survey a person who was on strike and who did no work during a week was classified as out of the labour force in that week.

A person was classified as having worked mostly full time in 1975 if the number of weeks in which he worked 35 hours or more (*full-time work*) exceeded or was equal to the number of weeks in which he worked less than 35 hours (*part-time work*). If the number of weeks worked full time was less than the number of weeks worked part time he was classified as having worked mostly part time. When absent on paid leave (including paid sick leave) he was classified according to the usual hours worked in the job from which he was absent.

The table of standard errors and the comments on the reliability of estimates given on pages 691–2 are also applicable to this survey.

Further details of the survey were published in *Labour Force Experience During 1975*, February 1976 (6.26).

PERSONS EMPLOYED (*a*) AT SOME TIME DURING 1975, BY DURATION OF EMPLOYMENT IN THE YEAR

('000)

Duration of employment (weeks)	*Males*	*Married women*	*All females*	*Persons*
1 and under 4	41.5	31.8	59.7	101.2
4 " " 13	104.1	118.8	177.3	281.4
13 " " 26	100.6	131.6	181.5	282.0
26 " " 39	169.9	171.4	242.5	412.4
39 " " 49	274.9	150.4	236.1	511.0
49 " " 52	90.7	35.8	55.6	146.3
52	3,238.6	910.2	1,396.4	4,635.0
Total	**4,020.3**	**1,550.1**	**2,349.0**	**6,369.3**

(*a*) Non-institutional civilians aged 15 years and over.

PERSONS UNEMPLOYED(*a*) AT SOME TIME DURING 1975, BY DURATION OF UNEMPLOYMENT

('000)

Duration of unemployment (weeks)	*Males*	*Married women*	*All females*	*Persons*
1 and under 2	31.5	23.7	45.1	76.6
2 " " 4	68.8	36.0	68.3	137.1
4 " " 8	98.0	36.7	80.1	178.0
8 " " 13	84.5	30.3	56.1	140.6
13 " " 26	76.9	27.8	54.9	131.8
26 " " 52	66.1	23.0	50.2	116.3
52	14.4	8.3	15.6	30.1
Total	**440.2**	**185.8**	**370.3**	**810.5**

(*a*) Non-institutional civilians aged 15 years and over.

CIVILIAN POPULATION(*a*), FEBRUARY 1976, BY EMPLOYMENT STATUS IN 1975

('000)

Employment status	*Males*	*Married women*	*All females*	*Persons*
Civilian population in February 1976(*a*)	4,811.4	3,257.6	4,893.0	9,704.3
In the labour force at some time during 1975	4,078.5	1,597.9	2,440.2	6,518.7
For the whole year	3,487.5	957.6	1,514.6	5,002.1
For part of the year	591.0	640.3	925.6	1,516.6
Employed at some time during 1975	4,020.3	1,550.1	2,349.0	6,369.3
Mostly full time—				
No part-time work	3,805.7	925.5	1,553.6	5,359.2
Some part-time work	57.5	37.6	56.8	114.3
Mostly part-time—				
No full-time work	136.3	556.7	690.4	826.7
Some full-time work	20.8	30.2	48.2	69.0
Number of jobs held during 1975—				
One	3,276.3	1,360.2	1,999.1	5,275.4
Two	542.3	153.5	269.6	811.8
Three	120.2	22.9	47.4	167.6
Four	38.0	6.5	16.2	54.2
Five	20.3	*	6.3	26.6
Six or more	23.2	4.5	10.5	33.6
Unemployed at some time during 1975	440.2	185.8	370.3	810.5
One period of unemployment	326.8	149.9	301.7	628.5
Two periods	54.0	14.9	36.0	90.0
Three periods	28.6	8.9	14.7	43.3
Four or more periods	30.8	12.0	17.9	48.8
Out of the labour force for the whole of 1975	732.9	1,659.7	2,452.8	3,185.6

(*a*) Non-institutional civilians aged 15 years and over.

* Estimates less than 4,000 are not published because they are subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction, they should not be regarded as reliable.

Labour mobility

In February 1975 and 1976 surveys based on the quarterly population survey (*see* page 689) were conducted throughout Australia to obtain information about changes of employment or job location and other aspects of the mobility of the labour force.

A summary of the results of the survey conducted in February 1976 is shown below. The results of the survey conducted in February 1975 were published in *Labour Mobility*, February 1975 (6.43).

For the purposes of the survey, a *job* was defined as: (i) employment as a wage or salary earner (or unpaid family helper) by a particular employer, in a particular locality; or (ii) self-employment (with or without employees) in a particular locality. Thus, a change of job may have involved a change of employer without a change of job locality; a change of locality without a change of employer; or a change in both employer and locality. For example, the movement of an employer's operations to premises in a different locality would entail a change of job for employees who moved to the new location. Promotion or transfer of an employee which involved a move to premises in a different locality would also constitute a change of job. In capital cities and major towns, each suburb was considered to be a different locality; otherwise, each town and each country area associated with a town constituted a separate locality. It should be noted, however, that for a person who worked at different sites for the same employer (for example, a construction worker), his base of operations (i.e. his employer's office, depot, yard, etc.) was considered to be his place of work.

A *temporary job* was defined as a job of a temporary nature (e.g. relieving for someone who was away) in which the occupant had worked less than three months at the time of the survey.

The definitions of labour force categories used in this survey are the same as those used in the quarterly population survey. *See* page 689.

The table of standard errors and the comments on the reliability of estimates given on pages 691–2 are also applicable to this survey.

Further details of the survey were published in *Labour Mobility*, February 1976 (6.43).

LABOUR MOBILITY: SUMMARY OF CHARACTERISTICS(*a*)

	Males	*Females*	*Persons*
Civilian population (*b*) in February 1976	4,811.4	4,893.0	9,704.3
In the labour force at some time during 1975	*4,078.5*	*2,440.2*	*6,518.7*
Employed at some time during 1975	4,020.3	2,349.0	6,369.3
Number of employers worked for (*c*) (or businesses) during 1975—			
1	3,416.6	2,045.4	5,462.0
2	444.7	240.2	684.9
3	99.0	39.8	138.8
4 and over	60.0	23.6	83.6
Not employed at the end of 1975	271.1	419.4	690.5
Employed at the end of 1975	3,749.1	1,929.6	5,678.7
For one year or more in job held at the end of 1975	2,964.2	1,402.9	4,367.1
For less than one year in job held at the end of 1975	784.9	526.7	1,311.6
Did not have a previous job in the year	165.9	252.7	418.6
Had a previous job in the year	619.0	274.0	893.0
Did not change usual residence when obtaining job held at the end of 1975	629.1	456.2	1,085.4
Changed usual residence when obtaining job held at the end of 1975	155.8	70.5	226.2
Left a job in 1975	889.9	693.3	1,583.2
Did not leave a job in 1975	3,130.4	1,655.7	4,786.1
Out of the labour force for the whole of 1975	*732.9*	*2,452.8*	*3,185.6*

(*a*) For definitions, *see* text above. (*b*) Non-institutional civilians aged 15 years and over. (*c*) Not including second jobs of multiple jobholders.

NOTE. The estimates relate to labour mobility in 1975 of persons covered by the survey in February 1976. Because of emigration, deaths and other exits not all persons employed in 1975 were covered. Labour mobility may relate to experience outside Australia.

PERSONS(*a*) EMPLOYED AT SOME TIME IN 1975: NUMBER OF EMPLOYERS OR BUSINESSES IN 1975 AND CHANGE IN LOCATION WHILE WITH THE SAME EMPLOYER OR IN THE SAME BUSINESS IN 1975

('000)

Change in location while with the same employer or in the same business in 1975	*Number of employers or businesses in 1975*				*Total*
	1	*2*	*3*	*4 and over*	
MALES					
Did not change location	3,274.0	422.9	94.0	55.4	3,846.3
Changed location	142.5	21.9	5.0	4.6	174.0
Number of changes—					
1	117.5	17.2	4.5	*	139.5
2	12.1	*		*	17.0
3	5.3	*	*	*	7.4
4 and over	7.7	*	*	*	10.1
Total	*3,416.6*	*444.7*	*99.0*	*60.0*	*4,020.3*
FEMALES					
Did not change location	1,997.1	230.8	37.4	22.4	2,287.8
Changed location	48.3	9.4	*	*	61.2
Number of changes—					
1	39.6	7.3	*	*	48.9
2 and over	8.6	*	*	*	12.3
Total	*2,045.4*	*240.2*	*39.8*	*23.6*	*2,349.0*
PERSONS					
Did not change location	5,271.2	653.7	131.4	77.8	6,134.1
Changed location	190.8	31.3	7.4	5.7	235.2
Number of changes—					
1	157.1	24.6	4.2	*	188.5
2	15.0	5.3	*	*	21.5
3	6.7		*	*	9.9
4 and over	12.0	*	*	*	15.3
Total	**5,462.0**	**684.9**	**138.8**	**83.6**	**6,369.3**

(*a*) Non-institutional civilians aged 15 years and over.

* Estimates less than 4,000 are not published as they are subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction, they should not be regarded as reliable.

PERSONS(*a*) EMPLOYED AT THE END OF 1975: OCCUPATION AND DURATION OF JOB (*b*)

('000)

Duration of job(b) held at the end of 1975	*Professional and technical, etc.*	*Administrative, executive and managerial*	*Clerical*	*Sales*	*Farmers, fishermen, timber-getters, etc.*	*Transport and communication*	*Tradesmen, etc., n.e.c.(c)*	*Service, sport and recreation*	*Total*
				MALES					
Under 3 months—									
Temporary	5.6	*	7.1	7.1	8.9	4.0	32.8	5.9	72.1
Permanent	14.9	11.5	16.8	16.4	12.7	19.0	101.0	14.8	207.2
Total under 3 months	*20.4*	*12.3*	*23.9*	*23.5*	*21.6*	*23.0*	*133.8*	*20.7*	*279.3*
3 months and under 6 months	15.6	14.9	19.1	16.5	11.6	14.5	90.9	13.0	196.0
6 months and under 1 year	36.4	20.9	30.4	26.1	16.3	23.0	139.7	16.8	309.6
Under 1 year	*72.5*	*48.1*	*73.4*	*66.1*	*49.4*	*60.4*	*364.5*	*50.6*	*784.9*
1 year and under 2 years	53.4	31.9	43.2	31.8	29.5	33.8	180.3	22.4	426.4
2 years and under 3 years	46.3	25.7	35.0	23.3	26.3	25.7	167.5	20.6	370.5
3 years and under 4 years	42.6	29.3	25.0	19.3	26.1	26.0	148.1	20.6	337.0
4 years and under 5 years	29.8	20.4	17.8	12.0	15.4	15.8	99.8	12.8	223.9
5 years and over	173.6	169.9	128.3	72.2	196.3	135.5	667.5	63.1	1,606.4
Total	*418.2*	*325.5*	*322.7*	*224 7*	*343.0*	*297.3*	*1,627.7*	*190.1*	*3,749.1*
				FEMALES					
Under 3 months—									
Temporary	*	*	13.2	9.5	*	*	5.8	11.8	47.3
Permanent	11.4	*	43.1	21.7	*	*	15.1	25.5	123.0
Total under 3 months	*15.2*	*	*56.3*	*31.2*	*4.9*	*4.8*	*20.9*	*37.3*	*170.2*
3 months and under 6 months	14.8	*	50.6	18.1		*	19.7	25.9	134.5
6 months and under 1 year	36.1	*	79.9	33.8	*	4.0	24.9	38.2	222.0
Under 1 year	*66.1*	*5.0*	*186.9*	*83.1*	*7.6*	*11.1*	*65.4*	*101.4*	*526.7*
1 year and under 2 years	62.1	*	113.8	41.6	5.1	7.7	26.8	50.0	311.1
2 years and under 3 years	42.1	4.2	100.5	33.0	6.0	5.5	31.0	39.6	261.9
3 years and under 4 years	33.2	6.4	69.9	25.9	5.2	6.3	27.8	33.5	201.5
4 years and under 5 years	19.1		43.0	13.1	*		14.4	22.2	121.9
5 years and over	70.8	20.2	165.7	47.3	38.1	13.5	71.5	79.3	506.5
Total	*293.4*	*39.8*	*679.8*	*244.0*	*65.5*	*44.2*	*236.9*	*326.0*	*1,929.6*
				PERSONS					
Under 3 months—									
Temporary	9.4	*	20.3	16.6	10.3	5.4	38.6	17.7	119.4
Permanent	26.3	13.0	60.0	38.1	14.0	22.3	116.1	40.3	330.1
Total under 3 months	*35.6*	*14.1*	*80.3*	*54.7*	*24.3*	*27.8*	*154.7*	*58.0*	*449.5*
3 months and under 6 months	30.5	15.8	69.7	34.6	13.7	16.7	110.6	38.9	330.5
6 months and under 1 year	72.5	23.2	110.2	59.9	19.1	27.0	164.6	55.1	531.5
Under 1 year	*138.6*	*53.2*	*260.3*	*149.1*	*57.1*	*71.5*	*429.9*	*152.0*	*1,311.6*
1 year and under 2 years	115.4	35.9	157.0	73.5	34.6	41.5	207.2	72.4	737.5
2 years and under 3 years	88.4	29.9	135.5	56.3	32.3	31.3	198.5	60.2	632.4
3 years and under 4 years	75.8	32.4	94.9	45.2	31.3	28.9	175.8	54.1	538.5
4 years and under 5 years	49.0	23.7	60.8	25.1	18.8	19.3	114.2	34.9	345.8
5 years and over	244.5	190.1	294.0	119.5	234.4	149.0	739.0	142.4	2,112.9
Total	**711.6**	**365.2**	**1,002.5**	**468.7**	**408.5**	**341.5**	**1,864.6**	**516.1**	**5,678.7**

(*a*) *See* note (*a*) previous page. (*b*) For definition *see* page 709. (*c*) Includes miners and quarrymen, metal trades workers, building workers, and other tradesmen, production-process workers and labourers, n.e.c.

* *See* footnote * to table on the previous page.

Child care

In May 1973 a survey, based on the quarterly population survey (*see* page 689), was conducted throughout Australia in order to obtain, for persons who were in the labour force and who also had the responsibility for the care of children under twelve years of age, information about the arrangements they made to have their children cared for while they themselves were at work (including arrangements for after-school and school holiday care). The inquiry was directed mainly to working mothers, but males with the sole responsibility for children were also included. The results of the survey were published in Year Book No. 60, pages 715–7.

Superannuation

In February 1974 a survey, based on the quarterly population survey (*see* page 689), was conducted throughout Australia to obtain information about employed persons covered by superannuation-type schemes and those not so covered, and about other persons who were receiving or had received benefits from such schemes. The results of the survey were published in Year Book No. 60, pages 717–9.

Frequency of pay

In August 1974 a survey was conducted in conjunction with the quarterly population survey (*see* page 689) in order to obtain information about the frequency of pay of wage and salary earners. The results of a similar survey conducted in February 1969 were published in *Labour Force Experience During 1968* (6.26).

For the purposes of this survey, questions were asked of employed wage and salary earners, excluding those persons whose main activity during the survey week was attendance at an educational institution, even though they may have done some work for pay or profit for an employer. Employers, self-employed persons and unpaid family helpers were excluded from the survey.

The table of standard errors and the comments on the reliability of estimates given earlier in this chapter are also applicable to this survey.

Further details of the survey were published in *Frequency of Pay*, August 1974 (6.46).

EMPLOYED WAGE AND SALARY EARNERS(*a*): INDUSTRY AND FREQUENCY OF PAY, AUSTRALIA, AUGUST 1974

Industry	*Frequency of pay*							
	Weekly or more often		*Fortnightly*		*Monthly*		*Total(b)*	
	'000	*Per cent*	*'000*	*Per cent*	*'000*	*Per cent*	*'000*	*Per cent*
MALES								
Agriculture	31.1	33.1	21.6	23.0	28.4	30.2	94.0	100.0
Forestry, fishing and hunting	6.8	34.9	8.1	41.9	*	*	19.4	100.0
Mining and quarrying	27.4	40.6	33.6	49.8	6.4	9.5	67.4	100.0
Manufacturing	730.2	77.4	132.7	14.1	79.0	8.4	943.2	100.0
Electricity, gas and water	43.3	46.6	49.2	53.0	*	*	92.8	100.0
Construction	251.1	71.1	87.5	24.8	12.8	3.6	353.1	100.0
Wholesale and retail trade	415.4	80.6	36.0	7.0	61.6	12.0	515.6	100.0
Transport and storage	110.3	49.9	99.7	45.1	9.3	4.2	221.0	100.0
Communications	*	*	91.0	97.8	*	*	93.0	100.0
Finance, insurance, real estate and business services	53.2	28.1	109.5	57.8	24.4	12.9	189.5	100.0
Public administration and defence	20.5	12.3	144.3	86.7	*	*	166.4	100.0
Community services	35.0	13.9	190.0	75.5	20.4	8.1	251.7	100.0
Entertainment, recreation, restaurants, hotels and personal services	79.0	80.0	13.3	13.5	5.6	5.7	98.8	100.0
Total	*1,805.1*	*58.1*	*1,016.3*	*32.7*	*250.6*	*8.1*	*3,105.8*	*100.0*
FEMALES								
Agriculture, forestry, fishing, etc.	8.1	49.8	*	*	*	*	16.3	100.0
Mining and quarrying	*	*	*	*	*	*	*	100.0
Manufacturing	317.9	91.6	20.1	5.8	7.4	2.1	347.1	100.0
Electricity, gas and water	*	*	4.9	65.0	*	*	7.6	100.0
Construction	15.0	81.7	*	*	*	*	18.3	100.0
Wholesale and retail trade	345.3	90.6	22.3	5.8	9.6	2.5	381.0	100.0
Transport and storage	22.6	64.8	11.0	31.4	*	*	34.9	100.0
Communication	*	*	29.9	93.8	*	*	31.9	100.0
Finance, insurance, real estate and business services	79.1	43.5	91.9	50.6	7.3	4.0	181.9	100.0
Public administration and defence	7.4	9.7	67.4	88.2	*	*	76.4	100.0
Community services	75.5	17.4	333.9	76.8	14.9	3.4	434.8	100.0
Entertainment, recreation, restaurants, hotels and personal services	145.5	88.6	12.0	7.3	*	*	164.3	100.0
Total	*1,020.9*	*60.1*	*600.8*	*35.4*	*49.9*	*2.9*	*1,698.1*	*100.0*

For footnotes *see* end of table.

EMPLOYED WAGE AND SALARY EARNERS(*a*): INDUSTRY AND FREQUENCY OF PAY, AUSTRALIA, AUGUST *1974—continued*

Industry	*Frequency of pay*						*Total(b)*	
	Weekly or more often		*Fortnightly*		*Monthly*			
	'000	*Per cent*	*'000*	*Per cent*	*'000*	*Per cent*	*'000*	*Per cent*
PERSONS								
Agriculture	38.2	35.1	24.0	22.0	30.9	28.4	108.9	100.0
Forestry, fishing and hunting	7.8	37.3	8.5	41.0	*	*	20.8	100.0
Mining and quarrying	28.5	40.1	35.6	50.1	6.7	9.5	71.0	100.0
Manufacturing	1,048.1	81.2	152.7	11.8	86.4	6.7	1,290.2	100.0
Electricity, gas and water	45.9	45.8	54.1	53.9	*	*	100.4	100.0
Construction	266.1	71.6	90.0	24.2	13.7	3.7	371.5	100.0
Wholesale and retail trade	760.7	84.8	58.3	6.5	71.3	7.9	896.6	100.0
Transport and storage	132.9	51.9	110.6	43.2	10.5	4.1	255.9	100.0
Communication	*	*	120.9	96.8	*	*	124.9	100.0
Finance, insurance, real estate and business services	132.3	35.6	201.4	54.2	31.7	8.5	371.4	100.0
Public administration and defence	27.9	11.5	211.7	87.2	*	*	242.8	100.0
Community services	110.5	16.1	523.9	76.3	35.2	5.1	686.4	100.0
Entertainment, recreation, restaurants, hotels and personal services	224.6	85.4	25.3	9.6	9.2	3.5	263.1	100.0
Total	2,826.0	58.8	1,617.1	33.7	300.5	6.3	4,804.0	100.0

(*a*) Non-institutional civilians aged 15 years and over. (*b*) Includes 33,900 males and 26,500 females paid at other intervals.

* Estimates less than 4,000 are not published as they are subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction they should not be regarded as reliable.

In August 1974 a survey was conducted in conjunction with the quarterly population survey (*see* page 689) in order to obtain information about the amount and timing of paid annual leave taken by wage and salary earners during the period August 1973 to July 1974. The results of a similar survey conducted in February 1969 were published in *Labour Force Experience During 1968* (6.26).

For the purposes of this survey, questions were asked of all employed wage and salary earners, except those persons whose main activity during the survey week was attendance at an educational institution, even though they may have done some work for an employer for pay or profit. Employers, self-employed and unpaid family helpers were excluded from the survey.

Respondents were asked whether they had taken any paid leave or holidays in the period August 1973 to July 1974 and, if so, in which months the leave was taken. Long-service leave (furlough), absence from work on account of illness or injury, and leave without pay were not included. In recording the amount of leave, separate periods of leave taken within a month were aggregated. Provision was not made in the survey for recording leave taken in more than three different months.

The table of standard errors and the comments on the reliability of estimates given earlier in this chapter are also applicable to this survey.

Further details of the survey were published in *Annual Leave*, August 1974 (6.45).

PERIODS OF PAID LEAVE TAKEN BY EMPLOYED WAGE AND SALARY EARNERS(*a*) IN EACH MONTH FROM AUGUST 1973 TO JULY 1974, AUSTRALIA

	Periods of paid leave				*Total periods of paid leave taken*		*Total weeks of paid leave taken*	
Month	*One-week periods ('000)*	*Two-week periods ('000)*	*Three-week periods ('000)*	*Four-week periods ('000)*	*Number ('000)*	*Per cent of total*	*Number ('000)*	*Per cent of total*
				BY MALES				
1973—								
August	41.9	44.0	22.0	17.1	125.0	3.8	264.3	3.9
September	40.8	35.8	27.2	13.1	117.0	3.5	246.6	3.6
October	24.1	27.4	30.3	14.7	96.5	2.9	228.4	3.3
November	28.1	25.6	25.6	15.3	94.6	2.8	217.3	3.2
December	585.4	204.8	57.9	25.6	873.6	26.3	1,270.9	18.6
1974—								
January	150.6	460.9	200.4	127.9	939.7	28.3	2,185.0	31.9
February	54.6	64.3	57.3	29.3	205.6	6.2	472.4	6.9
March	41.9	49.0	44.9	27.5	163.3	4.9	384.6	5.6
April	57.8	53.1	36.7	25.3	172.9	5.2	375.3	5.5
May	72.5	112.6	48.4	36.1	269.6	8.1	587.2	8.6
June	42.4	37.3	31.7	27.2	138.7	4.2	321.2	4.7
July	48.9	33.2	26.6	23.6	132.3	4.0	289.5	4.2
Total	*1,189.0*	*1,148.0*	*609.0*	*382.7*	*3,328.7*	*100.0*	*6,842.7*	*100.0*
				BY FEMALES				
1973—								
August	22.1	24.2	9.2	6.4	61.8	4.1	123.5	4.0
September	25.9	18.3	10.6	6.0	60.7	4 1	118.0	3.8
October	9.7	14.2	12.6	5.7	42.2	2.8	98.7	3.2
November	12.5	11.4	13.2	*	40.6	2.7	88.8	2.9
December	232.8	113.6	21.0	10.8	378.1	25.3	566.1	18.3
1974—								
January	58.0	172.8	76.2	89.7	396.7	26.5	991.1	32.0
February	27.9	27.9	28.3	12.1	96.1	6.4	216.8	7.0
March	18.2	23.3	23.0	9.5	74.0	4.9	171 7	5.5
April	21.6	25.3	17.0	8.4	72.2	4.8	156.6	5.1
May	35.5	83.8	22.2	10.8	152.3	10.2	313.1	10.1
June	19.6	20.6	13.0	7.1	60.3	4.0	128.1	4.1
July	24.5	16.3	12.3	7.8	60.9	4.1	125.3	4.0
Total	*508 2*	*551.6*	*258.6*	*177.6*	*1,496.0*	*100.0*	*3,097.8*	*100.0*
				BY PERSONS				
1973—								
August	64.0	68.1	31.2	23.5	186.8	3.9	387.8	3.9
September	66.7	54.0	37.8	19.1	177.6	3.7	364.6	3.7
October	33.8	41.7	42.9	20.3	138.7	2.9	327.1	3.3
November	40.7	36.9	38.7	18.8	135.2	2.8	306.1	3.1
December	818.2	318.4	78.9	36.4	1,251.8	26.0	1,837.0	18.5
1974—								
January	208.5	633.7	276.6	217.6	1,336.5	27.7	3,176.2	32.0
February	82.6	92.2	85.6	41.4	301.7	6.3	689.2	6.9
March	60.1	72.3	68.0	37.0	237.3	4.9	556.4	5.6
April	79.4	78.3	53.7	33.7	245.1	5.1	531.8	5.4
May	108.8	196.4	70.6	46.9	421.9	8.8	900.3	9.1
June	62.0	57.9	44.7	34.3	199.0	4.1	449.3	4.5
July	73.4	49.5	39.0	31.4	193.2	4.0	414.8	4.2
Total	1,698.2	1,699.6	867.7	560.3	4,824.7	100.0	9,940.6	100.0

(*a*) Non-institutional civilians aged 15 years and over who were employed wage and salary earners in August 1974. It should be noted that the figures in this table relate to periods of leave taken and are, therefore, greater than counts of persons who took leave.

* Estimates less than 4,000 are not published as they are subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction they should not be regarded as reliable.

School leavers

In May 1975, a survey was conducted in conjunction with the quarterly population survey (*see* page 689) in order to obtain information on the current employment status and tertiary education experience of persons who had left school during the years 1970 to 1974.

Caution should be exercised in comparing survey results for persons leaving school in different years. It should be borne in mind that the length of time since leaving school can have a marked effect on the work experience of the leaver, e.g. the table below indicates that, in general, the unemployment rate decreases as the period since leaving school increases; the reason being that leavers in the earlier years would generally have had more work experience and a greater opportunity to obtain and keep a job.

Further details of the survey were published in *School Leavers, 1970 to 1974: Their Employment Status and Education Experience*, May 1975 (6.53).

SCHOOL LEAVERS, 1970 TO 1974: EMPLOYMENT STATUS(*a*) IN MAY 1975

Left school in—	*Employed* ('000)	*Unemployed* ('000)	*Total labour force* ('000)	*Unemployment rate* (*per cent*)	*Not in the labour force* ('000)	*Total* ('000)
			MALES			
1970	101.7	4.6	106.2	4.3	7.3	113.5
1971	83.9	5.1	88.9	5.7	11.7	100.7
1972	91.0	7.0	98.0	7.1	17.9	115.9
1973	101.6	6.3	107.9	5.8	17.7	125.6
1974	88.9	11.3	100.2	11.3	27.9	128.2
			FEMALES			
1970	77.6	5.0	82.7	6.1	28.7	111.4
1971	70.2	4.8	75.1	6.4	23.1	98.1
1972	69.6	7.5	77.1	9.7	25.8	102.9
1973	85.7	9.2	94.9	9.7	25.2	120.1
1974	73.6	16.0	89.7	18.0	33.5	123.2
			PERSONS			
1970	179.3	9.6	188.9	5.1	36.0	224.9
1971	154.1	9.9	164.0	6.0	34.8	198.8
1972	160.6	14.4	175.1	8.3	43.7	218.8
1973	187.3	15.4	202.8	7.6	42.9	245.7
1974	162.5	27.3	189.9	14.4	61.4	251.3

(*a*) For definitions *see* page 690.

Persons not in the labour force

In November 1975, a survey was conducted in conjunction with the quarterly population survey (*see* page 689) in order to obtain information about persons aged 15 to 64 years who were not in the labour force: in particular, their intentions regarding entering or re-entering the labour force, whether they had ever held a regular job and, if so, how long ago and for what reason they had left it, their educational qualifications, and whether they would like a job if suitable child-care arrangements were available for children for whom they were responsible. A summary of the results of the survey is shown below.

Definitions of *employed*, *unemployed* and *not in the labour force* used in this survey conform to those used in the quarterly population survey (*see* page 689).

A *regular job* was defined as one which had lasted for two months or more and in which the person had worked at least an average of five hours a week.

Persons included in the survey who were not looking for work were asked to give reasons why they were not doing so. Reasons were ranked in the order of priority in the table below. Where more than one reason was given, only the higher or highest-ranked has been shown.

Discouraged workers were defined as persons who wanted a job but were not looking for work because of any of the following reasons: considered too young or too old by employers; language or racial difficulties; lacked necessary training, skills or experience; or no jobs in locality or line of work.

Further details of the survey were published in *Persons Not in the Labour Force*, November 1975 (6.59).

CIVILIAN POPULATION 15 YEARS OF AGE AND OVER, BY EMPLOYMENT STATUS, NOVEMBER 1975

	Number ('000)			*Per cent of population*		
Employment status	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Employed	3,769.3	2,029.8	5,799.1	77.8	41.1	59.3
Unemployed	149.6	129.5	279.1	3.1	2.6	2.9
Not in the labour force . . .	924.4	2,782.6	3,707.1	19.1	56.3	37.9
Aged 65 years and over . .	406.5	652.8	1,059.3	8.4	13.2	10.8
Aged 15 to 64 years . . .	517.9	2,129.8	2,647.7	10.7	43.1	27.1
Attending an educational institution . . .	291.2	251.0	542.2	6.0	5.1	5.5
Permanently unable to work .	40.1	14.2	54.3	0.8	0.3	0.6
Inmate of an institution .	32.7	15.4	48.1	0.7	0.3	0.5
Keeping house, retired or voluntarily inactive . .	153.9	1,849.2	2,003.1	3.2	37.4	20.5
Had not looked for work in the four weeks before interview week . . .	146.2	1,818.3	1,964.5	3.0	36.8	20.1
Other(*a*)	7.7	30.9	38.6	0.2	0.6	0.4
Total	**4,843.3**	**4,942.0**	**9,785.3**	**100.0**	**100.0**	**100.0**

(*a*) Comprises persons who were looking for work in the survey week but had not taken active steps to find a job, and others who had been looking for work in the three weeks before the survey week. These persons are not classified as unemployed.

PERSONS AGED 15 TO 64 YEARS NOT IN THE LABOUR FORCE WHO WERE KEEPING HOUSE, RETIRED OR VOLUNTARILY INACTIVE(*a*): REASON FOR NOT LOOKING FOR WORK(*b*) AND WHETHER INTENDING TO LOOK FOR WORK IN THE TWELVE MONTHS, NOVEMBER 1975

('000)

	Intention to look for work in the next twelve months				*Total*		
Reason for not looking for work(b)	*Intended to look*	*Might look*	*Would not look*	*Did not know*	*Males*	*Females*	*Persons*
Own ill-health, physical disability or pregnancy	37.3	24.4	376.7	15.3	90.0	363.6	453.6
Did not want to or need to work, believed should stay at home	72.8	60.3	1,091.5	43.2	50.5	1,217.3	1,267.9
Family considerations(*c*) . . .	58.9	27.4	95.2	9.3	*	189.9	190.9
Ill-health other than own . . .	5.6	*	4.2	*	*	13.1	14.1
Lack of child care arrangements/ children too young . . .	51.7	22.9	87.4	7.8	*	169.7	169.7
Discouraged(*d*)	18.6	6.7	7.0	*	*	31.8	33.8
Considered too young or too old by employers	4.6	*	*	*	*	7.7	7.7
Language or racial difficulties; lacked necessary schooling, training skills or experience						4.1	4.4
No jobs in locality or line of work .	14.0	*	*	*	*	20.0	21.7
Other reasons(*e*)	10.4	*	4.4	*	*	15.8	18.3
Total Males	24.5	6.8	108.8	6.1	146.2	..	..
Total Females	173.5	114.5	1,466.0	64.4	..	1,818.3	..
Total Persons	198.0	121.3	1,574.8	70.4	..	..	1,964.5

(*a*) Excludes the 38,600 persons described in footnote to previous table. (*b*) Highest-ranked reason only. *See* text above. (*c*) Includes 7,100 females whose husbands disapproved of their taking a job. (*d*) For definition, *see* text above. (*e*) Includes persons who stated they were not looking for work because there were no jobs available in suitable hours.

* Estimates less than 4,000 are not published as they are subject to sampling variability too high for most practical purposes. Although figures for these small components can be derived by subtraction, they should not be regarded as reliable.

PERSONS AGED 15 TO 64 YEARS NOT IN THE LABOUR FORCE WHO WERE KEEPING HOUSE, RETIRED OR VOLUNTARILY INACTIVE(*a*): TIME SINCE LAST REGULAR JOB (IF ANY)(*b*) AND REASON FOR LEAVING IT, NOVEMBER 1975

('000)

	Time since last regular job(b)						
Reason for leaving last regular job(b)	*Under 1 year*	*1 year and under 3 years*	*3 years and under 5 years*	*5 years and under 10 years*	*10 years and under 20 years*	*20 years and over*	*Total*
			MALES				
Own ill-health or injury	19.6	21.3	15.8	13.7	5.1	*	77.5
Dismissed, laid off, slack work	8.7	*	*	*	*	*	12.7
Did not need to work any longer (including retired)	11.7	15.3	6.0	*	*	*	37.0
Other reasons(*c*)	5.4	*	*	*	*	*	11.0
Total	**45.3**	**41.1**	**23.9**	**17.9**	**6.5**	*	**(*d*)146.2**
			FEMALES				
Family considerations	93.6	159.1	116.5	198.3	188.2	317.9	1,073.7
Marriage	6.4	21.1	22.3	63.6	103.7	266.5	483.6
Pregnancy	56.1	103.9	72.2	104.9	66.1	35.3	438.4
Other	31.2	34.2	22.0	29.8	18.3	16.2	151.7
Unsatisfactory work arrangements	15.1	18.0	10.9	11.1	8.1	*	66.6
Own ill health or injury	24.2	34.9	26.1	25.5	17.8	5.7	134.1
Dismissed, laid off, slack work	45.0	40.1	19.9	19.4	18.2	11.3	153.8
Did not need to work any longer (including retired)	25.8	44.8	27.1	30.4	29.9	14.1	172.1
Other reasons	11.2	7.9	*	*	*	*	33.0
Total	**214.9**	**304.7**	**203.9**	**288.3**	**265.7**	**355.8**	**(*d*)1,818.3**
			PERSONS				
Family considerations	94.4	160.1	117.1	198.6	188.5	318.6	1,077.3
Unsatisfactory work arrangements	16.9	18.7	11.2	11.4	8.1	*	69.6
Own ill-health or injury	43.8	56.1	41.9	39.1	22.9	7.8	211.6
Dismissed, laid off, slack work	53.7	42.4	20.9	20.0	18.2	11.3	166.5
Did not need to work any longer (including retired)	37.5	60.1	33.1	33.0	31.0	14.4	209.1
Other reasons	14.0	8.5	*	*	*	*	37.3
Total	**260.3**	**345.8**	**227.8**	**306.2**	**272.3**	**359.1**	**(*d*)1,964.5**

(*a*) Excludes the 38,600 persons in footnote to table on page 716. (*b*) For definition *see* text on page 715. (*c*) Includes 6,700 males who left because of family considerations or unsatisfactory work arrangments. (*d*) Includes 8,000 males and 185,000 females who had never had a regular job.

* *See* footnote * to previous table.

EMPLOYED WAGE AND SALARY EARNERS

The figures in this section generally relate only to civilian wage and salary earners, not the total labour force; they therefore exclude employers, self-employed persons, unpaid helpers and the unemployed. Also excluded, because of the inadequacy of current data, are wage and salary earners in agriculture and private households. For the sake of brevity, wage and salary earners are referred to in the tables as 'employees'. Defence forces are included in the table on page 719.

The estimates are based on comprehensive data (referred to herein as 'benchmarks') derived from the 1971 population census and other relevant sources such as special returns from government bodies and the Bureau's economic censuses and surveys.

The data needed to derive the estimates for periods subsequent to the benchmark data (June 1971) are obtained from three main sources: (*a*) payroll tax returns; (*b*) returns from government bodies; and (*c*) some other current returns of employment (e.g. for hospitals); the balance, i.e. unrecorded private employment is estimated. At June 1971 recorded employment obtained from the foregoing sources represented about 90 per cent of employees in the industries covered, as determined by the benchmarks. Monthly estimates are published in *Employment and Unemployment* (6.4).

Although the series measure reasonably well the short-term trends in employment in the defined field, they may be less reliable for longer-term measurement. There are conceptual differences between benchmark and current data, and changes in such factors as labour turnover, multiple jobholding and part-time working all affect the trend over longer periods.

Concepts and definitions

The concepts and definitions applicable to these estimates are those adopted at the 1971 population census and conform closely to the recommendations of the Eighth International Conference of Labour Statisticians. At the census the following questions were asked in respect of all persons fifteen years of age and over:

> 'Did this person have a full or part-time job, or business or farm of any kind last week (even if this person was temporarily absent from a job because of sickness, holidays, industrial dispute, etc.)?'
>
> 'Did this person do any work at all last week for payment or profit (even if this person was working only part-time or helping without pay in a family business)?'

Provided they had not been temporarily laid off by their employers without pay for the whole of the week, persons who answered 'yes' to either of these questions were classified as employed. Persons in this category were classified as wage or salary earners if on their census schedule they were stated to be 'a wage or salary earner' in the job they held in the previous week.

Adoption of new benchmarks

As results from each successive population census become available it is customary to derive from them new benchmarks for the monthly employment series, and to revise the published estimates for all periods subsequent to the date of the previous census. Benchmarks for June 1971 were established by analysing data from the 1971 population census and other relevant sources such as special returns from government bodies and the Bureau's economic censuses and surveys.

For a number of reasons the estimates of employed wage and salary earners previously published for June 1971 differed from the corresponding figures obtained from the 1971 population census. The principal reasons for the differences are as follows:

(*a*) there is an unavoidable accumulation of errors in the intercensal employment estimates, e.g. in the estimates of movements in unrecorded employment;

(*b*) apart from the undercount to which population censuses are generally subject, evidence from census post-enumeration surveys indicates that the completion of census questionnaires by householders tends to identify a smaller number of persons as being in the labour force than do other methods of measurement (e.g. household surveys conducted by personal interview), and that components of the total labour force, such as employed wage and salary earners, tend to be affected in the same way;

(*c*) estimated monthly movements in civilian employment are derived mainly from returns from employers relating to establishments or enterprises, but the population census figures are derived from particulars recorded by individuals on census schedules. The latter do not in all cases provide precise information to allow accurate coding of industry;

(*d*) previously published estimates for June 1971 included about 7,000 male and 17,000 female trainee teachers who are not included in the new benchmarks or subsequent monthly estimates;

(*e*) crews of overseas ships are excluded from the monthly employment estimates;

(*f*) some persons are not enumerated in the census in the State or Territory in which they work, e.g. persons resident in New South Wales and working in the Australian Capital Territory and persons who at the time of the population census are on holidays interstate.

Population census data were not always accepted as a matter of course in determining the June 1971 benchmarks. The factors mentioned above were taken into account and particulars of employment obtained from other sources (*see* above) were used in analysing and, where necessary, in revising the estimates. It should be noted that figures in this section are subject to further revision as the results of later censuses and surveys become available.

Current data

Current data supplied by reporting enterprises or establishments generally refer to persons on the payroll for the last pay-period in each month. Persons who are on paid leave or who work during part of the pay-period and are unemployed or on strike during the rest of the period are generally counted as employed. Those not shown on employers' payrolls because they are on leave without pay, on strike or stood down for the entire period are excluded.

In all States and Territories except Queensland, payroll tax returns are currently lodged by all employers paying more than $923 a week in wages. For Queensland the figure is $1,200. Certain Commonwealth Government bodies, religious and benevolent institutions, public hospitals and other similar organisations are specifically exempted under the Commonwealth and State Payroll Tax Acts. The exemption level in the States was revised from $400 to $800 a week from January 1976, while the level in the Territories remained at $400 a week until January 1977, when the current levels were adopted.

Industry

The industry classification used in this section is the *Australian Standard Industrial Classification* (*ASIC*), described in the Bureau publication *Australian Standard Industrial Classification* (Preliminary Edition), 1969, Volume 1. This industry classification is not directly comparable with those adopted for population censuses before 1971 and used in previously published estimates of civilian employees.

It is expected that in due course a revised series will be published for the period June 1966 to May 1971, classified according to ASIC. However, it may not be possible to provide as much industry detail as for June 1971 and subsequent periods. ASIC estimates cannot be derived for periods prior to June 1966.

CIVILIAN EMPLOYEES AND DEFENCE FORCES: AUSTRALIA

EXCLUDING EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

	Civilian employees				
June—	*Private*	*Government(a)*	*Total*	*Defence Forces(b)*	*Total*
		MALES			
1971	2,112.9	811.8	2,924.7	80.5	3,005.2
1972	2,102.5	838.1	2,940.6	78.3	3,018.9
1973	(*c*)2,127.3	857.9	(*c*)2,985.2	71.0	(*c*)3,056.2
1974	2,200.4	867.8	3,068.2	64.7	3,132.9
1975	(*c*)2,119.3	924.1	(*c*)3,043.5	65.8	(*c*)3,109.3
		FEMALES			
1971	1,220.2	277.3	1,497.5	2.7	1,500.2
1972	1,238.4	288.9	1,527.3	2.8	1,530.1
1973	1,311.7	306.0	1,617.7	3.1	1,620.8
1974	1,402.3	336.0	1,738.3	2.9	1,741.2
1975	1,337.8	371.4	1,709.2	3.4	1,712.6
		PERSONS			
1971	3,333.2	1,089.1	4,422.3	83.2	4,505.5
1972	3,340.9	1,127.0	4,467.9	81.1	4,549.0
1973	(*c*)3,439.0	1,163.9	(*c*)4,602.9	74.1	(*c*)4,677.0
1974	3,602.7	1,203.8	4,806.5	67.6	4,874.1
1975	(*c*)3,457.1	1,295.5	(*c*)4,752.7	69.2	(*c*)4,821.9

(*a*) Includes semi-government bodies. *See* explanation on page 721. (*b*) Permanent defence forces in Australia and overseas. (*c*) Affected by industrial disputes.

CIVILIAN EMPLOYEES: PRINCIPAL INDUSTRIES, AUSTRALIA

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

	June—				
ASIC Division(a)	*1971*	*1972*	*1973*	*1974*	*1975*
		MALES			
Forestry, fishing and hunting(*b*)	13.5	14.1	14.2	13.9	15.0
Mining	69.8	69.7	69.7	71.3	74.9
Manufacturing	954.5	939.9	(*e*)940.1	960.5	895.8
Electricity, gas and water	89.9	90.4	90.3	90.5	91.9
Construction	379.6	383.2	381.5	385.7	(*e*)393.3
Wholesale and retail trade	512.3	518.9	536.6	552.8	549.1
Transport and storage	214.3	211.2	211.2	218.4	218.8
Communication	65.9	67.1	69.2	71.7	72.8
Finance, insurance, real estate and business services	186.6	188.1	193.2	202.8	198.3
Public administration and defence(*c*)	126.3	132.2	138.0	143.0	154.0
Community services	218.7	229.7	241.0	252.5	268.9
Entertainment, recreation, restaurants, hotels and personal services(*d*)	93.5	96.1	100.2	105.1	110.9
Total	*2,924.7*	*2,940.6*	*(e)2,985.2*	*3,068.2*	*(e)3,043.5*

For footnotes *see* end of table.

CIVILIAN EMPLOYEES: PRINCIPAL INDUSTRIES, AUSTRALIA—*continued*

Excluding Defence Forces and Employees in Agriculture and Private Domestic Service

('000)

ASIC Division(*a*)	*June—* *1971*	*1972*	*1973*	*1974*	*1975*
			FEMALES		
Forestry, fishing and hunting(*b*) .	0.6	0.8	0.8	1.0	0.9
Mining	5.7	5.5	5.5	5.5	5.9
Manufacturing	344.4	334.7	347.3	370.9	309.0
Electricity, gas and water . .	8.8	8.8	8.8	9.1	9.2
Construction	16.3	16.8	17.9	19.1	18.2
Wholesale and retail trade . .	347.7	360.5	388.7	416.3	406.7
Transport and storage . . .	32.8	32.5	33.9	36.9	36.7
Communication	26.2	26.6	27.3	29.5	29.7
Finance, insurance, real estate and business services	161.5	162.1	171.9	185.0	181.2
Public administration and defence(*c*) .	58.6	62.5	67.9	76.0	89.5
Community services	352.7	374.6	397.4	428.4	458.7
Entertainment, recreation, restaurants, hotels and personal services(*d*) .	142.4	142.0	150.3	160.5	163.6
Total	*1,497.5*	*1,527.3*	*1,617.7*	*1,738.3*	*1,709.3*
			PERSONS		
Forestry, fishing and hunting(*b*) .	14.1	14.8	15.0	14.9	15.9
Mining	75.4	75.2	75.1	76.8	80.8
Manufacturing	1,298.9	1,274.6	(*e*)1,287.4	1,331.4	1,204.8
Electricity, gas and water . .	98.7	99.2	99.2	99.5	101.1
Construction	395.9	400.0	399.4	404.7	(*e*)411.5
Wholesale and retail trade . .	860.0	879.4	925.4	969.2	955.7
Transport and storage . . .	247.1	243.8	245.1	255.3	255.5
Communication	92.0	93.7	96.6	101.2	102.5
Finance, insurance, real estate and business services	348.0	350.2	365.1	387.9	379.5
Public administration and defence(*c*) .	184.9	194.7	205.9	219.0	243.5
Community services	571.4	604.3	638.3	681.0	727.4
Entertainment, recreation, restaurants, hotels and personal services(*d*) .	235.9	238.1	250.4	265.7	274.5
Total	**4,422.3**	**4,467.9**	(*e*)**4,602.9**	**4,806.5**	**4,752.7**

(*a*) Australian Standard Industrial Classification. (*b*) Excludes ASIC Sub-divisions O1 (Agriculture) and O2 (Services to agriculture). (*c*) Excludes members of the permanent defence forces. (*d*) Excludes ASIC Sub-division 94 (Private households employing staff). (*e*) Affected by industrial disputes.

CIVILIAN EMPLOYEES

Excluding Defence Forces and Employees in Agriculture and Private Domestic Service

('000)

June—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T. (a)*	*Aust.*
					MALES				
1971 . .	1,096.3	805.7	377.3	263.6	234.2	86.7	23.5	37.5	2,924.7
1972 . .	1,094.4	811.3	388.5	263.4	230.2	87.2	24.7	40.8	2,940.6
1973 . .	(*b*)1,104.5	(*b*)819.9	398.9	270.5	233.8	87.9	25.1	44.8	(*b*)2,985.2
1974 . .	1,123.7	842.9	415.2	278.4	243.0	89.6	26.8	48.5	3,068.2
1975 . .	1,102.3	(*b*)832.9	414.4	278.3	247.9	90.7	24.5	52.4	(*b*)3,043.5

For footnotes *see* end of table.

CIVILIAN EMPLOYEES—*continued*

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T. (a)	Aust
				FEMALES					
1971 . .	569.7	439.0	173.8	133.5	110.9	38.9	9.3	22.6	1,497.5
1972 . .	574.2	445.6	181.3	136.8	115.4	39.6	10.7	23.8	1,527.3
1973 . .	604.0	470.5	194.2	145.9	123.1	41.3	11.5	27.3	1,617.7
1974 . .	643.9	502.2	210.0	161.0	132.3	44.1	13.3	31.5	1,738.3
1975 . .	625.2	487.3	210.3	159.5	133.1	46.6	11.7	35.4	1,709.2
				PERSONS					
1971 . .	1,666.0	1,244.7	551.1	397.0	345.2	125.5	32.7	60.0	4,422.3
1972 . .	1,668.6	1,256.9	569.8	400.2	345.5	126.8	35.4	64.6	4,467.9
1973 . .	(b)1,708.5	(b)1,290.3	593.1	416.3	356.8	129.2	36.6	72.0	(b)4,602.9
1974 . .	1,767.7	1,345.2	625.3	439.4	375.3	133.7	40.1	80.0	4,806.5
1975 . .	1,727.5	(b)1,320.3	624.6	437.8	381.0	137.3	36.2	87.9	(b)4,752.7

(a) Includes persons employed in the Australian Capital Territory who reside in adjoining areas. (b) Affected by industrial disputes.

Government employees

The numbers of civilian employees of government bodies (Commonwealth, State, local and semi-government) in each State and Territory at June 1975 are shown in the following table. Government employees comprise not only administrative employees but also all other employees of government bodies on services such as railways, road transport, banks, postal and telecommunications, air transport, education (including universities), radio, television, police, public works, factories and departmental hospitals and institutions.

CIVILIAN EMPLOYEES OF GOVERNMENT BODIES: JUNE 1975(*a*)

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

State or Territory	Commonwealth Government			State Government(b)			Local Government(b)			Total(b)		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
New South Wales . .	89.0	35.5	124.5	172.3	80.2	252.5	57.1	7.4	64.5	318.5	123.1	441.6
Victoria . . .	72.2	26.6	99.8	135.6	54.0	189.6	22.3	7.5	29.8	230.1	88.2	318.3
Queensland . . .	29.8	12.0	41.8	82.3	30.6	112.9	22.5	2.1	24.5	134.7	44.6	179.2
South Australia . .	24.9	7.5	32.4	58.4	34.5	92.9	6.8	1.1	7.9	90.1	43.2	133.3
Western Australia. .	16.7	6.7	23.4	55.0	24.6	79.6	8.8	1.4	10.2	80.5	32.7	113.1
Tasmania . . .	6.0	2.1	8.1	19.7	9.5	29.2	3.4	0.5	3.8	29.1	12.0	41.1
Northern Territory .	9.5	5.8	15.3	..	..	..	0.2	..	0.2	9.7	5.9	15.6
Australian Capital Territory(c) . .	31.5	21.8	53.4	..	..	..	..	..	..	31.5	21.8	53.3
Australia . .	**279.6**	**118.1**	**397.7**	**523.4**	**233.4**	**756.8**	**121.1**	**19.9**	**141.0**	**924.1**	**371.4**	**1,295.5**

(a) Includes semi-government bodies. See explanation above. (b) Excludes State and local government employees (3,500 in June 1975) engaged in agriculture. (c) Includes persons employed in the Australian Capital Territory who reside in adjoining areas.

CIVILIAN EMPLOYEES OF GOVERNMENT BODIES(*a*): AUSTRALIA

EXCLUDING DEFENCE FORCES AND EMPLOYEES IN AGRICULTURE AND PRIVATE DOMESTIC SERVICE

('000)

June—	Commonwealth Government			State Government			Local Government			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1971	249.4	88.8	338.2	470.2	173.3	643.5	92.2	15.3	107.4	811.8	277.3	1,089.1
1972	253.2	92.0	345.2	482.5	181.0	663.5	102.4	15.9	118.3	838.1	288.9	1,127.0
1973	261.8	97.6	359.4	490.4	191.4	681.8	105.7	17.1	122.7	857.9	306.0	1,163.9
1974	269.8	107.9	377.7	499.2	210.2	709.4	98.8	17.9	116.7	867.8	336.0	1,203.8
1975	279.6	118.1	397.7	523.4	233.4	756.8	121.1	19.9	141.0	924.1	371.4	1,297.5

(a) Includes semi-government bodies. *See* explanation above.

COMMONWEALTH EMPLOYMENT SERVICE

Statutory warrant for the Commonwealth Employment Service (C.E.S.) is to be found in the *Re-establishment and Employment Act* 1945 (Sections 47 and 48). In brief, the main functions of the C.E.S. are to assist people seeking employment to obtain positions best suited to their training, experience and qualifications; and to assist employers seeking labour to obtain employees best suited to their needs. The organisation and functions of the C.E.S. conform to the provisions of the Employment Service Convention, 1948, of the International Labour Organisation (I.L.O.) which was ratified by Australia in December 1949. In addition, C.E.S. practices accord substantially with the provisions of the I.L.O. Employment Service Recommendation, 1948.

The C.E.S. functions on a decentralised basis within the Manpower Development and Operations Divisions of the Department of Employment and Industrial Relations. The Central Administration is in Melbourne and there is a Regional Office in the capital city of each State. There are 186 offices of the C.E.S. in suburban and the larger provincial centres and C.E.S. agents in the smaller country centres. The employment offices are distributed as follows: New South Wales 65; Victoria 44; Queensland 31; South Australia 21; Western Australia 18; Tasmania 7. These figures include 8 Professional Employment Offices located in the 6 capital cities and Canberra and Darwin. The New South Wales figure includes 3 offices in Canberra while the South Australian figure includes 3 offices in the Northern Territory.

Fares assistance is available to eligible persons to travel to and return from interviews arranged through C.E.S.

Training assistance under the National Employment and Training System (N.E.A.T.) is available to eligible persons through C.E.S. Full or part-time training may be undertaken within educational or training institutions, or by correspondence, to assist individuals to obtain suitable employment. Persons approved for training are eligible for living and other allowances. Assistance under the National Apprenticeship Assistance Scheme (N.A.A.S.), which encourages the employment of apprentices and also offers living-away-from-home allowances, is also available through C.E.S.

C.E.S. administers the Income Maintenance aspects of the Structural Adjustment Assistance Scheme and where redundancy occurs in Commonwealth Government employment, provides relocation assistance to eligible persons who wish to relocate to areas with greater employment opportunity.

Specialised facilities are provided for young people, Aboriginals, handicapped persons, ex-members of the defence forces, migrants, ex-prisoners and youth trainees, rural workers and persons with professional and technical qualifications. The C.E.S. provides vocational guidance and counselling free of charge in all States and has a staff of qualified psychologists for this function. Vocational counselling is available to any person in the labour force or about to enter the labour force as well as ex-servicemen and handicapped persons. In New South Wales the C.E.S. provides vocational counselling for adults, including ex-servicemen and the handicapped, while the State Department of Labour and Industry provides a vocational guidance service within the school system and for young persons leaving school.

Specially trained staff visit institutions, hospitals and rehabilitation units to interview and counsel people with complex employment problems. C.E.S. provides a supportive information service to intending school-leavers by liaising with schools through its school's employment program. Since 1971 C.E.S. has opened Career Reference Centres which provide occupational information in written and audio visual form for school-leavers, students, parents, teachers and other professionals in Sydney, Melbourne, Adelaide, Perth, Hobart, Newcastle and Wollongong.

All applicants for unemployment benefit under the *Social Services Act* 1947 must register at an office or agency of the C.E.S., which is responsible for certifying whether or not suitable employment can be offered to them. The C.E.S. is responsible for assisting migrant workers, sponsored by the Commonwealth Government under the Commonwealth Nomination and similar schemes, to obtain suitable employment. This includes recommending the hostels to which migrants should be allocated on arrival and, where necessary, to arrange their movement to initial employment. Assistance is also offered to other migrants. Since 1951 it has been responsible for recruiting Australian experts for overseas service under the Colombo Plan and the United Nations Expanded Programme of Technical Assistance (now replaced by the U.N. Development Programme). The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development.

In association with placement activities, regular surveys of the labour market are carried out and detailed information is supplied to interested Commonwealth and State Government departments and instrumentalities and to the public. Employers, employees and other interested persons are advised on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

The Service completed its twenty-ninth year of operation in May 1975. During 1974 there were 1,543,804 applicants who registered for employment, of whom 1,002,119 were referred to employers and 506,317 placed in employment. New vacancies notified numbered 813,246.

Persons registered for employment

The following table shows the number of persons registered with the C.E.S. at the Friday nearest the end of the month, who claimed when registering that they were not employed, and who were seeking full-time employment, i.e. 35 hours or more per week. They include persons referred to employers but whose employment was still unconfirmed, and persons who had recently obtained employment without notifying the C.E.S. All recipients of unemployment benefit are included. A change of definition has resulted in a different treatment of school leavers. Before July 1973, school leavers comprised all persons under the age of 21 who, at the time of registering with the C.E.S., (i) had ceased full-time primary or secondary education within the previous three months; or (ii) were still at school but notified the C.E.S. that they would leave school before the end of the school year if a full-time job were available. As from July 1973 (August for New South Wales) school leavers comprise all persons under the age of 21 who, at the time of registering with C.E.S. had ceased full-time primary or secondary education within the previous six months.

PERSONS REGISTERED FOR EMPLOYMENT WITH THE COMMONWEALTH EMPLOYMENT SERVICE

(*Source:* Department of Employment and Industrial Relations)

June(a)	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1971	21,609	17,878	9,412	7,975	6,683	2,682	66,239
1972	34,176	25,430	11,693	12,328	12,076	3,498	99,201
1973	27,003	22,219	10,636	9,339	8,461	3,718	81,376
1974(*d*)	28,957	21,258	9,537	7,983	7,782	3,310	78,827
1975	94,595	70,360	37,491	20,336	17,003	6,190	245,975

(*a*) Generally at Friday nearest end of month. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory. (*d*) The discontinuity between June 1973 and 1974 is caused by a change in definition of school leavers. This change in definition is explained above.

Job vacancies

The following table shows the number of vacancies registered with the Commonwealth Employment Service. The figures refer to vacancies which employers claimed were available immediately or would be available by the end of the following calendar month.

VACANCIES REGISTERED WITH THE COMMONWEALTH EMPLOYMENT SERVICE

(*Source:* Department of Employment and Industrial Relations)

June(a)	*N.S.W.(b)*	*Vic.*	*Qld*	*S.A.(c)*	*W.A.*	*Tas.*	*Aust.*
1971	13,623	9,228	3,305	2,596	2,340	679	31,771
1972	8,695	8,411	3,024	2,093	1,564	699	24.486
1973	21,532	16,522	6,986	5,152	3,302	1,014	54,508
1974	23,160	23,561	6,180	4,899	3,302	1,078	62,180
1975	8,984	7,868	2,484	3,012	2,346	823	25,517

(*a*) Generally at Friday nearest end of month. (*b*) Includes Australian Capital Territory. (*c*) Includes Northern Territory.

Note. Sample surveys were conducted by the Australian Bureau of Statistics in March 1974 and March 1975 to obtain information on the level and composition of job vacancies (*see* below). For a number of reasons the estimates obtained from these surveys differed substantially from the numbers of vacancies registered with the Commonwealth Employment Service at those dates. For example, the survey estimates of total vacancies at March 1975 was 55,200. Results of the surveys and reasons why the survey estimates differ from C.E.S. statistics were published in *Job Vacancies, March 1974 and March 1975* (6.49).

Job Vacancies

Surveys of job vacancies were conducted in March 1974 and March 1975 and a summary of the results of these surveys is shown in the table below. More detailed information and explanatory notes are contained in *Job Vacancies, March 1974 and March 1975* (6.49).

JOB VACANCIES

	March 1974		*March 1975*	
Major occupation group(a)	*'000*	*Per cent*	*'000*	*Per cent*
0. Professional, technical and related workers 1. Administrative, executive and managerial workers	15.5	9.4	9.9	18.0
2. Clerical workers	22.0	13.3	10.2	18.5
3. Sales workers	8.6	5.2	3.9	7.1
5. Miners, quarrymen and related workers	1.4	0.8	0.5	1.0
6. Workers in transport and communication	9.6	5.8	2.2	4.0
4, 7, 8. Tradesmen, production-process workers and labourers, n.e.c.(b)	97.3	58.9	23.7	42.9
9. Service, sport and recreation workers	10.8	6.5	4.7	8.5
Total	**165.2**	**100.0**	**55.2**	**100.0**

(a) Major occupation groups of the Australian Classification of Occupations. (b) Includes farmers, fishermen, hunters, timber-getters and related workers as reported by respondents whose principal industry was other than Agriculture etc. This industry was not included in the scope of the surveys.

Labour Turnover

Surveys of labour turnover were conducted in March 1974 and March 1975. Labour turnover was measured in terms of engagements and separations, information for the month of March being collected from individual private and government employees. A summary of the results of these surveys is given in the following table. More detailed results are published in *Labour Turnover, March 1974 and March 1975* (6.8).

LABOUR TURNOVER
(Per cent)

	Engagement rates			*Separation rates*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
MARCH 1974						
Administrative, clerical, managerial, etc.(a)	2.4	5.3	3.6	2.0	4.2	2.9
Other	7.4	9.7	8.0	6.7	8.0	7.1
Total	*5.8*	*7.6*	*6.4*	*5.2*	*6.2*	*5.5*
Private	7.2	8.5	7.7	6.5	7.2	6.8
Government	2.6	4.9	3.3	2.3	3.0	2.5
MARCH 1975						
Administrative, clerical, managerial, etc.(a)	1.8	3.6	2.6	1.6	3.0	2.2
Other	5.1	6.7	5.5	4.5	5.8	4.9
Total	*4.0*	*5.1*	*4.4*	*3.5*	*4.3*	*3.8*
Private	4.6	5.7	5.0	4.3	5.1	4.6
Government	2.8	3.4	3.0	1.9	2.3	2.0

(a) Administrative, office, clerical, managerial, executive and professional, etc., employees.

CHAPTER 21

MANUFACTURING INDUSTRY

Introduction

An historical summary of the development of manufacturing industry in Australia since 1901 is contained in earlier issues of the Year Book (*see* No. 51, pages 143–4).

Decentralisation and manufacturing industries

The decentralisation of secondary industries, and the steps taken by the Commonwealth and State Governments towards its development, are referred to in previous issues of the Year Book (*see* No. 51, page 144).

Bounties on manufacture

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate, or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards. (*See* Chapter 18, Public Finance for products on which bounties are paid).

Industries Assistance Commission and *Temporary Assistance Authority*

Both of these authorities are described in Chapter 11, Overseas Transactions.

Standardisation

The Commonwealth Scientific and Industrial Research Organization has functions concerned with the improvement of efficiency in industrial operations. For further particulars *see* the chapter Science and Technology of this Year Book.

The Standards Association of Australia is the organisation responsible for the preparation, on a national basis, of Australian standards for materials and products and standard codes of practice.

Formed as the Australian Commonwealth Engineering Standards Association in 1922, it was reconstituted as the Standards Association of Australia in 1929, and was incorporated by Royal Charter in 1950. It is an independent body having the full recognition and support of the Commonwealth and State Governments and of industry. Approximately half its funds are provided by Commonwealth Government grant, the remainder coming primarily from membership subscriptions and from sale of publications. Organisations, companies, and individuals are eligible for subscribing membership.

The Association is controlled by a Council comprising representatives from Commonwealth and State Governments and their departments, from associations of manufacturing and commercial interests, and from professional institutions. Standards are prepared by committees composed of expert representatives from the interests associated with the subjects under consideration. This assistance is on a voluntary basis.

Preparation of a standard is undertaken in response to a request from any responsible source, subject to verification that the standard will meet a genuine need. Standards may relate to one or more of several aspects of industrial practice such as terminology, test methods, dimensions, specifications of performance and quality of products, and safety or design codes. In general, standards derive authority from voluntary adoption based on their intrinsic merit, but in many cases where safety of life or property or consumer protection is involved, they may have compulsory application through statutory reference.

The Association is the owner of a registered certification trade mark covering conformity of products to standards. Manufacturers of products covered by Australian standards may obtain a licence to use the Australian Standard Mark, under conditions established by the Association.

The Association has international affiliations and is a member, representing Australia, of the International Organization for Standardization (ISO) and of the International Electrotechnical Commission (IEC). Close links are maintained with overseas standards organisations, and the Association acts as Australian agent for the procurement of ISO and IEC publications and the standards of other countries.

The Association has two specialised libraries, one in Sydney and one in Melbourne, containing the national standards of all countries with standards organisations. These libraries provide necessary material for committee work and a free information service to those concerned with standards.

The headquarters office of the Association is in Sydney, and there is a major branch office in Melbourne. Branch offices are located also in other capital cities and at Newcastle, New South Wales.

The National Association of Testing Authorities organises testing facilities throughout Australia to serve private and governmental needs. Membership is open to authorities whose testing laboratories conform to the standards of staffing and operations defined by the Association. Testing authorities may register their laboratories voluntarily. The Association assesses the competence of the laboratories and ensures that their standards of competence are maintained. Certificates of test issued by registered laboratories may be endorsed in the name of the Association. NATA endorsed test certificates are generally accepted by governmental, industrial and commercial interests.

Laboratories are registered for performance of specific tests in the fields of metrology, mechanical testing, electrical testing, optics and photometry, non-destructive testing, heat and temperature measurement, chemical testing, biological testing, and acoustic and vibration measurement.

The *Industrial Design Council of Australia* is engaged in activities aimed at encouraging better design in Australian-made goods and fostering a wider appreciation of good design throughout the community. The Council is representative of industry, commerce and government, together with designers and educationists. It is financed by donations from industry and commerce, and by Commonwealth and State Government grants. The Council's Field Advisory Service has a diagnostic and counselling role, assisting smaller manufacturers throughout Australia with product development policy and direction. Field advisers are based in IDCA State offices in Sydney, Melbourne, Brisbane, Adelaide and Perth. The Australian Design Index, published by the Council in five illustrated volumes covering specific product fields, provides details of articles which have received the *IDCA Design Label*. These products are also displayed in Australian Design Centres and in other exhibits arranged by the Council.

Regular contact is maintained with senior executives of manufacturing companies, departmental officers and designers through the Design Delegate program of lectures and information. Inquiries seeking professional design services are referred to qualified industrial designers. The Council is also concerned with raising the standard of training in industrial design in co-operation with education authorities.

Publications include a monthly bulletin, *Design Report*. The Council's national office is in Melbourne.

Productivity Action.

For information about the Productivity Group Movement and Productivity Promotion Council of Australia *see* the chapter, Science and Technology.

Manufacturing industry statistics

Manufacturing industry statistics from 1901 to 1967–68

A series of substantially uniform statistics exist from 1901 up until 1967–68 when the framework within which manufacturing statistics were collected was changed. The following table contains a summary of statistics on manufacturing activities in Australia over that period. More detailed manufacturing statistics in respect of this period have been included in Year Book, No. 57, pages 721–9 and earlier issues.

MANUFACTURING INDUSTRY: AUSTRALIA(*a*), 1901 TO 1967-68

				Value of—				
Year	Factories	Employment(*b*)	Salaries and wages paid(*c*)	Materials and fuel used	Output	Production (*d*)	Land and buildings (*e*)	Plant and machinery (*e*)
	No.	'000	$'000	$'000	$'000	$'000	$'000	$'000
1901 .	11,143	198	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1911 .	14,455	312	55,056	163,526	266,044	102,518	65,402	63,032
1920–21 .	17,113	367	125,864	427,118	647,986	220,868	121,662	137,310
1930–31 .	21,751	339	124,910	344,978	581,598	236,620	224,422	248,996
1940–41 .	27,300	650	275,838	773,762	1,289,590	515,828	288.188	322,712
1950–51 .	43,147	969	983,436	2,613,926	4,301,670	1,687,744	605,570	673,230
1960–61 .	57,782	1,145	2,289,230	6,115,930	10,465,765	4,349,835	2,389,140	2,785,565
1963–64 .	59,375	1,210	2,651,620	7,372.682	12,642,686	5,270,003	3,204,685	3,480,673
1964–65 .	61,042	1,269	2,993,709	8,140,600	14,037,355	5,896,754	3,505,859	3,766,253
1965–66 .	61,686	1,294	3,162,769	8,437,958	14,689,819	6,251,861	3,776,590	4,154,652
1966–67 .	62,500	1,309	3,407,683	9,015,844	15,892,845	6,877,001	4,061,193	4,706,843
1967–68 .	62,954	1,331	3,665,902	9,663,217	17,094,070	7,430,853	4,303,156	4,962,203

(*a*) Before 1 July 1964, excludes Northern Territory and Australian Capital Territory. (*b*) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (*c*) Excludes amounts drawn by working proprietors. (*d*) Value added in process of manufacture (i.e. value of output less value of materials and fuel, etc. used). (*e*) Depreciated or book values at 30 June. Includes estimated values of rented premises and machinery.

Manufacturing industry statistics from 1968-69

As from the year ended June 1969, the Censuses of Manufacturing, Electricity and Gas have been conducted within the framework of the integrated economic censuses which include the Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. As a result manufacturing industry statistics for 1968–69 and subsequent years are not directly comparable with previous years. The electricity and gas industries, which were previously included in the Annual Factory Census, were the subject of separate censuses, details of which are given on page 734. The integration of these economic censuses was designed to increase substantially the usefulness and comparability of economic statistics collected and published by the Bureau and to form a basis for the sample surveys which supply current economic statistics from quarter to quarter, particularly those which provide data for the quarterly national income and expenditure estimates.

The economic censuses of Manufacturing, Mining and Retail Trade previously conducted in Australia were originally designed and subsequently developed primarily to provide statistics for particular industries on a basis which would best suit the requirements of users interested in statistics of those industries. More recently there has been a growth of interest in statistics describing activity in the economy as a whole—reflected, for example, in the development of employment and earnings statistics, surveys of capital expenditure and stocks and the whole field of national accounts statistics. For such purposes statistics derived from economic censuses in the past have had serious limitations despite the fact that they covered a broad area of the whole economy. Because of the special-purpose nature of each of the censuses, there were no common definitions of data, there was no common system of reporting units, and, as a standard industrial classification was not used for these censuses, industry boundaries were not defined in ways which would avoid overlapping or gaps occurring between the industrial sectors covered. For these reasons, direct aggregation and comparison of statistics from different censuses were not possible.

The integration of these economic censuses meant that for the first time they were being collected on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result, the statistics for the industries covered by the censuses are now provided with no overlapping or gaps in scope, and in such a way that aggregates for certain important economic data such as value added, employment, wages and salaries, fixed capital expenditure and stocks can be obtained on a consistent basis for all sectors of the economy covered by the censuses.

For the integration of the various censuses it was necessary to undertake three major developments:

(*a*) The census units for which the statistics were to be collected (factories, mines, shops, etc.) had to be defined and identified in consistent ways and recorded in a central register, together with identifying data about the businesses owning and operating them.

(*b*) A standard industrial classification had to be adopted so that the census units could be classified in consistent ways and to enable the boundaries of the various economic censuses to be determined without gaps or overlapping between them.

(*c*) In order to bring the items of data to a consistent basis of definition in all censuses, it was necessary to revise all the forms used in previous censuses.

The standardisation of census units in the integration of economic censuses means that the basic census unit (the establishment), in general, now covers all the operations carried on under the one ownership at a single physical location. The manufacturing establishment is thus one predominantly engaged in manufacturing but the data supplied for it now cover (with a few exceptions) all activities at the location. Previously, the manufacturing establishment covered only a specified manufacturing activity primary to one class of industry. It now covers, in addition, subject to certain exceptions mentioned below:

(*a*) Any other manufacturing activity (i.e. production of goods primary to another class of industry).

(*b*) Any selling and distribution activities connected with the products manufactured.

(*c*) Any non-manufacturing activity (e.g. merchanting of goods not manufactured by the establishment; extraction of raw materials for use by the establishment).

The exceptions in general relate to locations where the subsidiary activities (in terms of gross value) exceed a specified value (currently $1.4 million), which are treated for statistical purposes as two or more establishments corresponding to the various kinds of activity carried on.

The establishment statistics also include data relating to separately located administrative offices and ancillary units serving the establishment and forming part of the business (enterprise) which owns and operates the establishment. These units were formerly excluded from the manufacturing census. They are units such as head offices, storage premises and manufacturers' sales branches or sales offices (except those of the kind which distribute to customers from stocks held by such branches or offices which are treated as establishments in the Wholesale Census).

The Australian Standard Industrial Classification (ASIC), described in the Bureau publication *Australian Standard Industrial Classification* (*Preliminary Edition*), 1969, *Vol.* 1, defines the industries in the economy for statistical purposes, thus permitting the scope of the different economic censuses to be specified without gaps or overlapping between them. It also sets out standard rules for identifying the statistical units (e.g. establishments) and for coding them to the industries of the classification. This classification is broadly convertible to the International Standard Industrial Classification adopted by the United Nations Statistical Commission. The adoption of the ASIC has resulted in changes in scope between the integrated economic censuses introduced in 1968–69 and the individual economic censuses conducted in previous years. The main changes in scope in the manufacturing census, apart from providing for a separate census for electricity and gas, are as follows.

(*a*) Establishments mainly engaged in the following activities, previously included in manufacturing censuses, are excluded as from 1968–69: motor vehicle repairs but not engine reconditioning; repair and servicing of agricultural machinery; dry-cleaning, laundering and clothes dyeing services; watch, clock and jewellery repairing; boot and shoe repairing; tyre retreading and repairing; custom dressmaking and tailoring (including clothing repair and alterations); installing and repairing of blinds and awnings, making up and installing of curtains; and repair of domestic appliances. Establishments mainly engaged in these activities are now included in the periodic Retail Trade or Wholesale Trade Censuses.

(*b*) Establishments mainly engaged in non-manufacturing activities but which also carry out, as a subsidiary activity, some manufacturing activities, and which in respect of those manufacturing activities, were previously included in the manufacturing census are excluded as from 1968–69 unless such establishments have manufacturing activities in excess of a specified value (currently $1.4 million).

(*c*) Establishments mainly engaged in the following activities, previously excluded in most States from manufacturing censuses, are included as from 1968–69: slaughtering, milk treatment, and publishing.

An indication of the effect of the changes referred to above can be gained from the following comparison. In the 1967–68 census there were approximately 62,600 manufacturing establishments (excluding electricity and gas establishments), with employment of 1,276,000. Of these, approximately 35,400, with employment of 1,097,000 (but *see* footnote (*b*) to the following table) would have been included in the 1967–68 census if ASIC had been used. Figures for the individual States and Territories are given below.

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Approximate number of manufacturing establishments—									
1967–68 census	24,900	18,000	6,100	6,200	5,300	1,800	180	240	62,600
1967–68 census if ASIC had been used(a)	13,800	11,400	3,500	3,000	2,500	960	70	100	35,400
Approximate number of employees (thousands)—									
1967–68 census	512	433	114	116	63	34	5		1,276
1967–68 census if ASIC had been used(b)	445	376	95	100	51	27	3		1,097

(a) Excludes the establishments referred to in (c), in the paragraph above. (b) These figures relate to employment as defined for the 1967–68 and previous year censuses. They thus exclude employment at the establishments referred to in (c) in the paragraph above, sales and distribution employees, employees connected with non-manufacturing activities and employees at separately located administrative offices and ancillary units serving manufacturing establishments. The figures, therefore, are not directly comparable with those for 1968–69 and subsequent years, which include the aforementioned employees.

The third step in integrating the censuses, whereby the items of data on the census forms were standardised for all census sectors, has meant changes in the content of the statistics. For example, the value of 'turnover' is now collected instead of the 'value of output' at the factory, and purchases and selected expenses are collected as well as the value of specified materials, fuels, etc., used. However the underlying concept of 'value added,' is similar to the former concept 'value of production', even though its method of derivation is different. Value added, the basic measure of the establishment's contribution to total production, is now calculated as turnover less purchases and transfers in (from other establishments of the enterprise), plus increase (or less decrease) in stocks. In the past the corresponding item, value of production, was obtained by deducting the value of materials, fuels, etc., used from the value of output at the factory. A detailed comparison of the method of derivation is shown in the following table.

Value of production *1967–68*	*Value added* *as from 1968–69*
Selling value at works, exclusive of all delivery costs or charges, of goods manufactured, treated or worked up during the year, including by-products, *plus*	Sales and transfers out (to other establishments of the enterprise), of goods manufactured by the establishment, *plus*
Value of other work done, . . . such as repairing and making up for customers, etc.	Sales and transfers out of goods not manufactured by the establishment, *plus*
	Bounties and subsidies on production, *plus*
	All other operating income, *plus*
	Capital work done for own use, or for rental or lease
Equals: Value of output	*Equals:* Value of turnover
	Plus: Closing stocks
	Less: Opening stocks
Less—	*Less—*
Value of materials used	Purchases and transfers in of materials, electricity, fuels, containers, etc.
Power, fuel and light used	Purchases and transfers in of goods for resale
Water used	Charges for commission and subcontract work
Lubricating oils used	Repair and maintenance expenses
Repairs, etc.	Outward freight and cartage, motor vehicle running expenses, sales commission payments
Containers used	
Equals: Value of production	*Equals:* Value added

Even though the concept of value added is similar to value of production, direct comparison of 1968–69 and previous figures will not be possible because of the change in census units already mentioned which has resulted in the value added for the whole establishment being reported, not merely the value added for the manufacturing process. Comparison is also affected, of course, by the change in the scope of the manufacturing census due to the adoption of ASIC. In addition, value added as calculated for the Manufacturing Census differs from the concept used in National Accounts where the concept of value added also excludes some administrative expenses and sundry charges and the change in stocks component is measured by valuing the physical change in stocks at current prices. It is not practicable in the Manufacturing Census to collect data fully in accord with the national accounts concept of value added.

A Census of Manufacturing was not conducted in Australia for the year 1970–71.

For a more detailed description of the Integrated Economic Censuses reference should be made to **Chapter 31, Year Book No. 56.**

Summary of operations

The following table shows the summary of operations for manufacturing establishments.

MANUFACTURING ESTABLISHMENTS—SUMMARY OF OPERATIONS, BY INDUSTRY SUB-DIVISION: AUSTRALIA, 1972-73 AND 1973-74

Industry sub-division	*ASIC code (a)*	*Number of establishments operating at end of June*	*Persons employed(b)*			*Wages and salaries $m*	*Turnover $m*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses $m*	*Value added $m*	*Fixed capital expenditure(c) $m*
			Males No.	*Females No.*	*Total No.*			*Opening $m*	*Closing $m*			
					1972–73							
Food, beverages and tobacco	21–2	4,349	149,603	53,495	203,098	890	6,137	675	741	4,260	1,943	223
Textiles	23	871	29,924	23,908	53,832	210	946	183	203	589	377	25
Clothing and footwear	24	3,147	24,572	87,049	111,621	355	1,216	192	206	667	564	19
Wood, wood products and furniture	25	5,906	71,755	11,079	82,834	315	1,269	158	170	697	584	54
Paper and paper products, printing	26	3,655	77,450	28,545	105,995	491	1,807	224	224	892	915	90
Chemical, petroleum, and coal products	27	1,184	47,886	17,601	65,487	352	2,017	349	352	1,134	886	127
Non-metallic mineral products	28	1,854	47,498	5,527	53,025	273	1,150	142	142	587	563	73
Basic metal products	29	635	89,113	5,988	95,101	515	3,004	535	558	2,023	1,005	330
Fabricated metal products	31	5,306	93,116	22,603	115,719	511	1,875	326	333	1,016	866	56
Transport equipment	32	1,528	136,166	16,652	152,818	745	2,699	495	459	1,585	1,078	110
Other machinery and equipment	33	4,830	136,860	47,852	184,712	849	3,003	715	713	1,613	1,389	94
Miscellaneous manufacturing	34	3,172	48,156	25,190	73,346	314	1,249	193	204	683	577	43
Total manufacturing		36,437	952,099	345,489	1,297,588	5,820	26,373	4,187	4,306	15,746	10,745	1,244
					1973–74							
Food, beverages and tobacco	21–2	4,249	147,622	56,550	204,172	1,060	6,820	737	823	4,780	2,126	249
Textiles	23	897	30,101	24,518	54,619	260	1,161	207	274	748	481	45
Clothing and footwear	24	3,180	24,217	85,751	109,968	424	1,442	205	258	819	676	20
Wood, wood products and furniture	25	6,038	73,142	12,535	85,677	393	1,601	166	219	901	753	58
Paper and paper products, printing	26	3,683	78,247	29,787	108,034	602	2,143	228	282	1,087	1,111	73
Chemical, petroleum and coal products	27	1,169	48,659	18,448	67,107	422	2,396	347	414	1,387	1,076	106
Non-metallic mineral products	28	1,911	49,574	5,882	55,456	339	1,358	144	166	716	664	96
Basic metal products	29	642	90,852	7,297	98,149	650	3,866	563	659	2,631	1,331	211
Fabricated metal products	31	5,434	94,346	24,694	119,040	621	2,270	330	416	1,269	1,087	56
Transport equipment	32	1,608	138,160	20,720	158,880	933	3,056	455	583	1,846	1,337	125
Other machinery and equipment	33	5,001	144,134	54,837	198,971	1,069	3,606	712	906	2,027	1,774	110
Miscellaneous manufacturing	34	3,332	50,334	28,037	78,371	402	1,526	205	268	856	733	66
Total manufacturing		37,144	969,388	369.056	1,338,444	7,177	31,247	4,299	5,268	19,067	13,149	1,215

(*a*) Australian Standard Industrial Classification. (*b*) Average over whole year. Includes working proprietors. (*c*) Outlay on fixed tangible assets less disposals.

Employment

The statistics on the number of persons employed shown in the following table relates to the average whole year employment including working proprietors, and including those working at separately located administrative offices and ancillary units in the State.

It should be noted that persons employed in each State (and their wages and salaries) relate to those employed at establishments, administrative offices or ancillary units located in that State, even though the administrative offices or ancillary units may have served establishments located in another State.

MANUFACTURING ESTABLISHMENTS—MALES, FEMALES AND PERSONS EMPLOYED BY INDUSTRY SUB-DIVISION: 1971-72, 1972-73 AND 1973-74

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
					MALES EMPLOYED					
Food, beverages and tobacco	21–2	47,919	45,203	26,490	12,960	9,797	4,393	407	453	147,622
Textiles	23	8,787	16,771	871	1,470	517	1,685	..	..	30,101
Clothing and footwear	24	6,986	14,464	1,186	1,152	325	104	..	..	24,217
Wood, wood products and furniture	25	24,319	17,790	11,279	7,543	7,154	4,594	80	383	73,142
Paper and paper products, printing	26	29,324	25,899	7,146	5,545	4,343	4,912	119	959	78,247
Chemical, petroleum and coal products	27	22,051	17,046	2,932	2,456	2,833	1,339	..	2	48,659
Non-metallic mineral products	28	20,035	13,498	6,065	3,849	4,470	1,065	221	371	49,574
Basic metal products	29	54,475	11,698	4,778	9,689	5,528	3,592	1,157	392	90,852
Fabricated metal products	31	35,468	30,846	9,849	9,508	7,075	1,143			94,346
Transport equipment	32	41,398	54,201	11,242	25,103	4,874	1,183	(b)	(b)	138,160
Other machinery and equipment	33	60,937	52,122	8,845	15,145	5,920	937	(b)	(b)	144,134
Miscellaneous manufacturing	34	19,665	21,383	3,094	4,351	1,566	256	2	17	50,334
Total manufacturing	1973–74	371,364	320,921	93,777	98,771	54,402	25,203	2,114	2,836	969,388
	1972–73	367,938	314,759	92,861	95,581	51,733	24,668	1,872	2,687	952,099
	1971–72	375,262	310,750	91,241	96,194	52,049	24,856	1,014	2,601	953,967
					FEMALES EMPLOYED					
Food, beverages and tobacco	21–2	18,221	18,465	7,481	5,653	4,485	1,955	125	165	56,550
Textiles	23	7,533	12,566	1,015	1,171	275	1,958	..	..	24,518
Clothing and footwear	24	30,113	45,632	4,872	3,370	1,508	256	..	..	85,751
Wood, wood products and furniture	25	4,158	3,131	2,056	1,421	1,317	377	11	64	12,535
Paper and paper products, printing	26	12,494	9,571	2,588	2,047	1,665	900	55	467	29,787
Chemical, petroleum and coal products	27	10,707	6,129	566	570	390	86	..	..	18,448
Non-metallic mineral products	28	2,352	2,161	376	434	435	83	13	28	5,882
Basic metal products	29	3,709	1,483	281	1,100	481	147	126	87	7,297
Fabricated metal products	31	10,424	8,215	2,234	2,354	1,136	214			24,694
Transport equipment	32	5,931	10,781	765	2,802	214	217	(b)	(b)	20,720
Other machinery and equipment	33	27,026	19,175	1,234	6,357	890	85	(b)	(b)	54,837
Miscellaneous manufacturing	34	12,189	11,608	1,315	2,185	686	46	..	8	28,037
Total manufacturing	1973–74	144,857	148,917	24,783	29,464	13,482	6,324	336	893	369,056
	1972–73	135,691	141,004	23,484	25,815	12,344	6,016	364	771	345,489
	1971–72	140,656	139,276	23,127	25,382	12,168	6,151	180	732	347,672
					PERSONS EMPLOYED					
Food, beverages and tobacco	21–2	66,140	63,668	33,971	18,613	14,282	6,348	532	618	204,172
Textiles	23	16,320	29,337	1,886	2,641	792	3,643	..	..	54,619
Clothing and footwear	24	37,099	60,096	6,058	4,522	1,833	360	..	..	109,968
Wood, wood products and furniture	25	28,477	20,921	13,335	8,964	8,471	4,971	91	447	85,677
Paper and paper products, printing	26	41,818	35,470	9,734	7,592	6,008	5,812	174	1,426	108,034
Chemical, petroleum and coal products	27	32,758	23,175	3,498	3,026	3,223	1,425	..	2	67,107
Non-metallic mineral products	28	22,387	15,659	6,441	4,283	4,905	1,148	234	399	55,456
Basic metal products	29	58,184	13,181	5,059	10,789	6,009	3,739	1,283	479	98,149
Fabricated metal products	31	45,892	39,061	12,083	11,862	8,211	1,357			119,040
Transport equipment	32	47,329	64,982	12,007	27,905	5,088	1,400	(b)	(b)	158,880
Other machinery and equipment	33	87,963	71,297	10,079	21,502	6,810	1,022	(b)	(b)	198,971
Miscellaneous manufacturing	34	31,854	32,991	4,409	6,536	2,252	302	2	25	78,371
Total manufacturing	1973–74	516,221	469,838	118,560	128,235	67,884	31,527	2,450	3,729	1,338,444
	1972–73	503,629	455,763	116,345	121,396	64,077	30,684	2,236	3,458	1,297,588
	1971–72	515,918	450,026	114,368	121,576	64,217	31,007	1,194	3,333	1,301,639

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Wages and salaries

The following table shows wages and salaries of all employees of manufacturing establishments including those working at separately located administrative offices and ancillary units in the State. Drawings of working proprietors are not included.

MANUFACTURING ESTABLISHMENTS—WAGES AND SALARIES BY INDUSTRY SUB-DIVISION: 1971-72, 1972-73 AND 1973-74

($ million)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Food, beverages and tobacco	21–2	357	342	173	86	66	29	3	3	1,060
Textiles	23	79	143	7	12	4	14	..	..	260
Clothing and footwear	24	141	240	20	16	6	1	..	..	424
Wood, wood products and furniture	25	136	98	56	40	37	23	..	3	393
Paper and paper products, printing	26	238	201	50	40	30	34	1	8	602
Chemical, petroleum and coal products	27	207	145	22	18	21	10	..	..	422
Non-metallic mineral products	28	143	95	38	25	28	7	1	3	339
Basic metal products	29	382	88	35	67	43	25	11	3	650
Fabricated metal products	31	249	206	58	58	40	6			621
Transport equipment	32	272	396	63	167	28	7	(b)	(b)	933
Other machinery and equipment	33	474	395	53	105	36	5	(b)	(b)	1,069
Miscellaneous manufacturing	34	164	176	20	31	9	1	..	..	402
Total manufacturing	1973–74	2,842	2,524	596	666	347	161	18	22	7,177
	1972–73	2,332	2,045	483	523	275	131	14	16	5,820
	1971–72	2,159	1,800	426	469	256	119	6	15	5,250

(a) Australian Standard Industrial Classification. (b) Not available for publication.

Turnover

The following table shows the value of turnover of manufacturing establishments. The figures include sales of goods whether produced by the establishment or not, transfers out of goods to other establishments of the same enterprise, bounties and subsidies on production, plus all other operating revenue from outside the enterprise, such as commission, repair and service revenue and the value of capital work done on own account. Rents, leasing revenue, interest (other than hire purchase), royalties and receipts from the sale of fixed tangible assets are excluded.

MANUFACTURING ESTABLISHMENTS—TURNOVER, BY INDUSTRY SUB-DIVISION 1971-72, 1972-73 AND 1973-74

($ million)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Food, beverages and tobacco	21–2	2,079	2,391	1,200	497	427	196	18	12	6,820
Textiles	23	362	621	33	69	18	58	..	..	1,161
Clothing and footwear	24	516	800	56	52	15	3	..	..	1,442
Wood, wood products and furniture	25	556	393	214	177	134	116	2	9	1,601
Paper and paper products, printing	26	857	725	165	153	93	130	2	20	2,143
Chemical, petroleum and coal products	27	1,182	751	186	94	140	44	..	..	2,396
Non-metallic mineral products	28	522	369	178	108	128	29	9	16	1,358
Basic metal products	29	1,968	467	459	360	375	183	55	11	3,866
Fabricated metal products	31	865	758	224	218	168	25			2,270
Transport equipment	32	791	1,387	280	492	87	17	(b)	(b)	3,056
Other machinery and equipment	33	1,632	1,315	182	340	119	13	(b)	(b)	3,606
Miscellaneous manufacturing	34	603	693	84	102	39	4	..	..	1,526
Total manufacturing	1973–74	11,933	10,669	3,261	2,663	1,741	818	87	76	31,247
	1972–73	10,119	9,078	2,845	2,172	1.376	679	43	61	26,373
	1971–72	9,276	8,055	2,433	1,941	1,240	596	29	50	23,620

(a) Australian Standard Industrial Classification. (b) Not available for publication.

Purchases, transfers in and selected expenses

The following table gives details of the value of purchases, transfers in and selected expenses. Figures include purchases of materials, fuel, power, containers, etc., plus transfers in of goods from other establishments of the enterprise, plus charges for commission and sub-contract work, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

MANUFACTURING ESTABLISHMENTS—PURCHASES, TRANSFERS IN AND SELECTED EXPENSES, BY INDUSTRY SUB-DIVISION: 1971-72, 1972-73 AND 1973-74

($ million)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Food, beverages and tobacco	21–2	1,458	1,695	855	324	298	131	12	8	4,780
Textiles	23	233	402	21	48	10	34	..	..	748
Clothing and footwear. .	24	302	451	29	29	7	1	..	..	819
Wood, wood products and furniture.	25	313	221	115	108	73	65	1	5	901
Paper and paper products, printing	26	437	371	80	81	41	72	..	5	1,087
Chemical, petroleum and coal products.	27	669	422	127	55	87	27	..	..	1,387
Non-metallic mineral products	28	277	188	97	56	68	14	5	11	716
Basic metal products . .	29	1,290	332	319	244	298	121	27	6	2,631
Fabricated metal products .	31	471	423	127	128	99	14			1,269
Transport equipment . .	32	443	848	176	329	41	7	(b)	(b)	1,846
Other machinery and equipment	33	912	737	106	194	69	6	(b)	(b)	2,027
Miscellaneous manufacturing	34	330	395	50	55	23	2	..	..	856
Total manufacturing .	1973–74	7,135	6,486	2,100	1,651	1,116	495	46	39	19,067
	1972–73	5,891	5,392	1,834	1,286	894	395	23	31	15,746
	1971-72	5,443	4,812	1,584	1,169	777	359	18	25	14,186

(a) Australian Standard Industrial Classification. (b) Not available for publication.

Stocks

Statistics on the value of opening and closing stocks at 30 June are shown in the following table. Figures include all the stocks of materials, fuels, etc., and finished goods and work-in-progress of the establishment whether located at the establishment or elsewhere.

MANUFACTURING ESTABLISHMENTS—OPENING AND CLOSING STOCKS 1971-72, 1972-73 AND 1973-74 BY INDUSTRY SUB-DIVISION

($ million)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
OPENING STOCKS AT 30 JUNE 1973										
Food, beverages and tobacco	21–2	235	266	85	101	26	23	2	..	737
Textiles	23	66	105	5	12	3	14	..	..	207
Clothing and footwear. .	24	72	113	9	9	2	..	..	..	205
Wood, wood products and furniture.	25	55	41	22	18	16	15	..	1	166
Paper and paper products, printing	26	90	81	18	13	9	15	..	2	228
Chemical, petroleum and coal products.	27	175	119	22	10	15	6	..	..	347
Non-metallic mineral products	28	65	35	16	10	13	3	1	1	144
Basic metal products . .	29	289	64	57	55	53	31	13	1	563
Fabricated metal products .	31	126	118	31	30	19	4			330
Transport equipment . .	32	114	220	34	75	8	4	(b)	(b)	455
Other machinery and equipment	33	308	295	29	56	22	2	(b)	(b)	712
Miscellaneous manufacturing	34	81	95	10	14	4	1	..	..	205
Total manufacturing .	..	1,675	1,553	337	404	191	117	17	6	4,299
CLOSING STOCKS AT 30 JUNE 1974										
Food, beverages and tobacco	21–2	278	296	90	105	28	24	2	..	823
Textiles	23	86	149	9	11	3	17	..	..	274
Clothing and footwear. .	24	90	141	13	11	2	..	..	..	258
Wood, wood products and furniture.	25	72	55	28	26	20	17	..	1	219
Paper and paper products, printing	26	113	100	22	17	11	17	..	2	282
Chemical, petroleum and coal products.	27	218	135	22	12	20	7	..	..	414
Non-metallic mineral products	28	73	44	19	12	13	3	1	1	166
Basic metal products . .	29	330	81	62	74	53	38	23	2	659
Fabricated metal products .	31	154	148	41	40	26	4			416
Transport equipment . .	32	155	276	38	100	9	5	(b)	(b)	583
Other machinery and equipment	33	387	368	37	77	33	2	(b)	(b)	906
Miscellaneous manufacturing	34	107	122	15	18	6	1	..	..	268
Total manufacturing .	..	2,062	1,915	397	502	224	134	26	8	5,268
Opening stocks . . .	1972–73	1,661	1,502	331	399	164	117	9	5	4,187
	1971–72	1,556	1,404	317	368	160	108	3	4	3,920
Closing stocks . . .	1972–73	1,689	1,553	333	410	183	116	17	6	4,306
	1971–72	1,662	1,489	338	399	169	117	4	5	4,183

(a) Australian Standard Industrial Classification. (b) Not available for publication.

Value added

The statistics on value added contained in the following table have been calculated by adding to the value of turnover the increase (or deducting the decrease) in the value of stocks, and deducting the value of purchases, transfers in and selected expenses. A more detailed description of the method of deriving value added is given on page 729.

MANUFACTURING ESTABLISHMENTS—VALUE ADDED, BY INDUSTRY SUB-DIVISION 1971-72, 1972-73 AND 1973-74

($ million)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Food, beverages and tobacco	21–2	664	727	350	176	131	67	6	5	2,126
Textiles	23	149	263	16	20	7	27	..	..	481
Clothing and footwear	24	231	377	33	25	8	2	..	..	676
Wood, wood products and furniture	25	260	186	106	77	66	52	1	5	753
Paper and paper products, printing	26	443	372	90	77	52	60	2	15	1,111
Chemical, petroleum and coal products	27	555	345	60	41	57	17	..	..	1,076
Non-metallic mineral products	28	254	189	83	54	60	15	4	5	664
Basic metal products	29	719	151	145	135	76	69	38	5	1,331
Fabricated metal products	31	422	365	106	100	75	11			1,087
Transport equipment	32	388	596	108	187	46	12	(b)	(b)	1,337
Other machinery and equipment	33	799	651	84	168	61	7	(b)	(b)	1,774
Miscellaneous manufacturing	34	299	325	39	51	17	2	..	..	733
Total manufacturing	1973–74	5.184	4,546	1,220	1,110	658	340	51	40	13,149
	1972–73	4,257	3,738	1,013	897	501	283	28	30	10,746
	1971–72	3,940	3,328	871	803	472	245	11	26	9,697

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Number of establishments

The following table shows the number of establishments, in each State, in operation at 30 June for the years indicated. These figures relate to manufacturing establishments as such and do not include the numbers of separately located administrative offices and ancillary units.

MANUFACTURING ESTABLISHMENTS—NUMBER OF ESTABLISHMENTS IN OPERATION AT END OF YEAR 1971-72, 1972-73 AND 1973-74, BY INDUSTRY SUB-DIVISION

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Food, beverages and tobacco	21–2	1,236	1,205	757	443	421	152	24	11	4,249
Textiles	23	309	420	64	50	35	19	..	..	897
Clothing and footwear	24	1,222	1,613	156	108	68	13	..	..	3,180
Wood, wood products and furniture	25	1,974	1,569	1,027	509	579	336	12	32	6,038
Paper and paper products, printing	26	1,561	1,238	309	248	225	65	8	29	3,683
Chemical, petroleum and coal products	27	536	373	79	80	80	21	..	..	1,169
Non-metallic mineral products	28	688	472	276	163	208	66	21	17	1,911
Basic metal products	29	240	219	59	62	43	13	4	2	642
Fabricated metal products	31	2,165	1,553	643	452	476	99	25	21	5,434
Transport equipment	32	478	507	223	184	172	37	5	2	1,608
Other machinery and equipment	33	2,134	1,740	342	410	285	72	3	15	5,001
Miscellaneous manufacturing	34	1,266	1,161	354	277	226	42	..	6	3,332
Total manufacturing	1973–74	13,809	12,070	4,289	2,986	2,818	935	102	135	37,144
	1972–73	13,619	11,734	4,212	2,914	2,814	912	100	132	36,437
	1971–72	13,943	11,408	4,001	2,979	2,727	933	80	135	36,206

(*a*) Australian Standard Industrial Classification.

Electricity and gas establishments

As mentioned on page 727, the electricity and gas industries, which were previously included in the Annual Factory Census, have been the subject of separate censuses as from 1968–69. In addition the electricity and gas census has been extended to cover distribution as well as production. The following tables show statistics for the years 1969–70 and 1971–72. Censuses were not conducted for 1970–71, 1972–73 or for 1973–74.

For electricity and gas, the basic census unit is an exception to the general concept of the standardised unit. Because of the nature of the activities of electricity and gas undertakings, the single operating location basis is not suitable. The establishment unit used consists of all locations, including administrative offices and ancillary units, mainly concerned with the production and/or distribution of electricity or gas, operated by the undertaking in the one State. The use of this concept is one of the reasons for the number of electricity and gas establishments since 1968–69 being considerably less than in previous years. The other main reason is that until 1967–68 a number of electricity generating stations operated by enterprises principally for their own use were included. However, as from 1968–69 these generating stations have been included in the electricity census only if sales and transfers of electricity exceeded $100,000 in value.

ELECTRICITY AND GAS ESTABLISHMENTS(*a*), SUMMARY OF OPERATIONS STATES AND TERRITORIES, 1969-70 AND 1971-72

State or Territory	*Number of establishments operating during year*	*Persons employed(b)*			*Wages and salaries ($m)*	*Turnover (c) ($m)*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses ($m)*	*Value added ($m)*	*Fixed capital expenditure(d) ($m)*
		Males (No.)	*Females (No.)*	*Total (No.)*			*Opening ($m)*	*Closing ($m)*			
					1969–70						
New South Wales—											
Electricity	51	23,628	2,358	25,986	113	580	45	47	277	305	165
Gas	34	2,769	502	3,271	12	44	3	3	18	27	2
Victoria—											
Electricity	13	13,558	1,311	14,869	64	289	21	23	94	197	96
Gas	8	3,447	574	4,021	19	57	6	5	17	39	20
Queensland—											
Electricity	21	7,760	772	8,532	32	158	11	11	63	94	52
Gas	7	592	115	707	2	10	1	1	4	6	1
South Australia—											
Electricity Gas	18	5,576	185	5,761	23	91	7	6	26	64	25
Western Australia—											
Electricity Gas	57	3,598	291	3,889	15	62	6	7	18	44	39
Tasmania—											
Electricity Gas	6	2,552	202	2,754	12	39	5	5	1	39	44
Northern Territory— Electricity Gas	6	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)
Australian Capital Territory— Electricity Gas	1										
Australia—											
Electricity	166	55,753	5,071	60,824	255	1,213	94	99	480	738	425
Gas	56	8,338	1,312	9,650	39	129	11	10	44	84	27
					1971–72						
New South Wales—											
Electricity	49	23,469	2,395	25,864	140	707	50	54	345	367	154
Gas	23	2,352	524	2,876	13	49	3	3	18	30	4
Victoria—											
Electricity	13	16,409	1,816	18,225	99	375	27	28	136	239	116
Gas	4										
Queensland—											
Electricity	21	8,038	837	8,875	45	194	13	14	79	116	66
Gas	7	565	104	669	3	12	1	1	5	7	1
South Australia—											
Electricity Gas	16	6,174	358	6,532	34	106	9	9	29	78	42
Western Australia—											
Electricity Gas	48	4,275	331	4,606	23	82	8	8	23	60	81
Tasmania—											
Electricity Gas	5	2,727	244	2,971	15	48	5	5	2	46	35
Northern Territory— Electricity Gas	6		(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)	(*e*)
Australian Capital Territory— Electricity Gas	1										
Australia—											
Electricity	153	57,089	5,391	62,480	332	1,444	105	112	591	861	452
Gas	40	7,409	1,298	8,707	41	148	10	11	57	91	43

(*a*) Covers production and distribution. (*b*) At end of June. Includes working proprietors. (*c*) In some States electricity is produced by certain undertakings and sold to other undertakings for distribution. In these States sales of electricity are duplicated due to the inclusion of the bulk sales to these distributors. (*d*) Outlay on fixed tangible assets less disposals. (*e*) Not available for publication. Included in total for Australia.

Principal factory products

The factory production of certain commodities is shown in the monthly and quarterly publications of the ABS, and in the bulletin *Manufacturing Commodities—Principal Articles Produced* (12.26).

The following table shows the total recorded production of some of the principal articles (i.e. of those for which production can be represented in quantitative terms) manufactured in Australia. A more complete list, where available, is published in the aforementioned bulletin.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS: AUSTRALIA

Commodity code	*Article*		*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Acid (in terms of 100%)—					
401.29	Hydrochloric	tonnes	47,370	40,719	53,888	41,968
401 37	Nitric	"	140,317	149,092	185,646	173,970
401.57	Sulphuric	'000 tonnes	1,756	2,266	2,434	1,770
171.03, 04, 07, 08	Aerated and carbonated waters	'000 litres	773,620	861,070	884,757	834,034
	Air-conditioning equipment—					
657.03, 05	Room air conditioners (refrigerated)	No.	41,843	29,506	49,860	51,625
657.13, 15	Room air coolers (evaporative coolers)	"	50,007	44,033	105,317	(*a*)
657.21, 22, 23	Package unit air conditioners	"	9,277	8,623	20,037	22,027
475.04, 06, 07, 85	Asbestos cement building sheets (finished)	'000 m^2	36,647	38,646	43,723	42,040
	Bags, leather, fibre, etc.—					
	Handbags—					
864.31	Leather	'000	509	371	334	n.a.
864.33	Plastic	"	1,655	1,271	1,279	n.a.
864.39	Other	"	383	359	346	n.a.
946.01–52	Hessian and calico bags	'000 doz	3,948	2,085	2,689	n.a.
864.11–19	Suitcases, kitbags and trunks	'000	1,778	1,707	1,543	n.a.
	Bath heaters—					
652.01	Electric	No.	7,394	7,001	7,556	6,117
652.03, 06, 08	Gas	"	3,358	2,767	2,346	1,288
652.05	Solid fuel	"	6,516	3,779	3,932	3,287
779.02–36	Bathing suits(*b*)	'000 doz	342	322	345	216
	Baths (exclude infants baths)—					
671.03	Pressed steel—Enamelled	'000	125	153	165	130
671.01, 04, 08	Other (exclude pressed steel, galvanised)	"	75	51	47	45
	Batteries, wet cell type—					
685.13, 15	Auto (S.L.I.) 6 volts	'000	380	372	375	368
685.17, 19	Auto (S.L.I.) 12 volts	"	2,095	2,089	2,168	2,428
685.33, 35	Radio, homelighter, fencer	No. of 2 volt cells	57,396	47,194	50,233	39,890
685.43–65	Traction, plant and other	"	157,971	140,399	196,132	217,147
172.02, 04, 06	Beer (excluding waste beer)	mil. litres	1,665	1,756	1,868	1,957
064.21	Biscuits	'000 kg	116,633	117,701	120,628	119,271
372,374	Blankets, Woollen—Pure and Mixtures	'000	1,832	1,688	1,700	1,475
152.02	Bran (wheaten)	'000 tonnes	134	126	124	135
172.21	Brandy	'000 litre Al	4,484	3,561	2,474	n.a.
777.41, 49	Brassieres	'000 doz	819	807	812	595
066.01–31	Breakfast food, cereal (ready to eat)	tonnes	55,318	57,366	58,780	64,602
472.01, 03	Bricks, clay	million	1,744	1,881	2,050	1,713
261.41	Briquettes, brown coal	'000 tonnes	1,308	1,221	1,164	1,092
051.30, 052.20, 32	Butter—from cream (exclude whey cream)	'000 kg	195,407	184,081	174,122	161,274
773.51, 53, 74, 75, 83	Cardigans, jumpers, etc.	'000 doz	1,930	2,050	2,041	1,679
474.02	Cement, Portland	'000 tonnes	4,884	5,097	5,412	5,086
051	Cheese (non-processed)	'000kg	80,871	93,445	95,793	98,789
	Cloth (including mixtures)—					
373.10–52	Cotton(*c*)	'000 m^2	47,147	46,391	50,361	41,364
374.02–16	Rayon and acetate	"	21,258	22,957	23,082	16,551
374.20–34	Synthetic (non-cellulosic)	"	41,555	85,761	107,278	84,831
372.02–50	Wool (excluding blanketing and rug)	"	13,870	9,946	9,250	7,308
435.22	Coke—Metallurgical	'000 tonnes	4,136	4,926	4,291	5,497
475.90	Concrete, ready mixed	'000 m^3	9,748	10,403	10,849	10,044
	Confectionery—					
104.06–18	Chocolate	'000 kg	52,597	50,151	55,799	63,647
104.21–29	Other	"	59,062	61,191	60,993	62,740
452.04	Copper, refined(*d*)	'000 tonnes	131	136	149	178
	Coppers (wash boilers)—					
653.31	Electric	No.	2,792	2,248	(*a*)	n.a.
653.33, 38, 39	Gas	"	273	134	(*a*)	n.a.

(*a*) Not available for publication. (*b*) Includes swim shorts. Excludes infants' and babies' swim-wear. (*c*) Excludes tyre-cord fabric and towelling. (*d*) Primary origin only.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS: AUSTRALIA—*continued*

Commoditv code	*Article*		*1971–72*	*1972–73*	*1973–74*	*1974–75*
171.06, 10	Cordials and syrups	'000 litres	68,495	81,217	92,833	91,273
777.01–29	Corsets and corselets	'000 doz	255	n.a.	237	183
611.01	Cycles (complete)	'000	131	166	193	216
804.01	Dentifrices (toothpaste)	'000 kg	5,546	5,266	5,653	n.a.
	Electric generators—					
503.06	Non-automotive—Alternating current	No.	3,081	2,691	5,679	n.a.
503.08	Direct current	„	139	n.a.	n.a.	n.a.
499.42	Electricity	mil. kWh	59,501	64,802	69,743	73,933
523.76–78	Electrodes for manual welding	'000 kg	23,453	21,000	24,890	26,958
502.22–39	Engines, spark and compression ignition(*a*)	'000	355	430	484	374
	Essences, flavouring—					
139.31	Domestic	'000 litres	417	398	393	n.a.
139.35	Industrial	„	5,017	5,409	6,310	n.a.
802.11, 12	Face powder	'000 kg	126	113	144	n.a.
696.01, 03, 05	Fans, electric (propeller type)	No.	405,196	457,110	622,993	616,430
045.01, 51	Fish, canned (including fish loaf)	'000 kg	6,322	7,136	6,140	12,262
	Floorboards—					
332.06	Australian timber	m³	310,041	331,516	320,319	n.a.
332.08	Imported timber	„	1,006	366	286	n.a.
	Floor coverings—					
841.01–07	Textile	'000 m²	21,594	25,671	30,747	23,308
841.31–61, 69	Smooth surface and embossed	„	13,104	13,057	11,893	8,187
841.67, 68	Timber parquetry	„	234	224	201	135
841.85	Underfelts, underlays, etc.(*b*)	„	17,459	16,454	17,116	15,150
692.21, 23	Floor polishers, electric	No.	35,998	30,816	30,234	24,981
	Flour—					
068.01	Self-raising	'000 kg	42,451	38,496	43,057	n.a.
062.01, 10, 32	Wheaten(*c*)	'000 tonnes	1,204	1,134	1,178	1,263
	Fruit juices, natural—					
074.61–69, 79	Single strength	'000 litres	91,547	186,769	166,327	n.a.
074.76, 89	Concentrated(*d*)	„	12,808	13,939	7,634	n.a.
781.06–31	Gloves, work(*e*)	'000 doz pairs	2,791	3,141	3,560	3,848
127.21	Glucose	'000 kg	52,632	57,414	59,661	59,205
832.58, 59	Golf clubs	doz	50,131	59,725	64,769	38,917
	Handkerchiefs					
786.01	Men's	'000 doz	1,672	1,215	1,213	n.a.
786.11	Women's	„	1,249	1,212	1,395	n.a.
	Heaters, room—					
651.01, 03	Solid fuel	No.	9,767	6,823	5,246	3,842
651.11–17	Electric radiators and fires	'000	813	801	845	813
651.04, 05, 21, 22, 26, 27	Gas fires and space heaters	No.	58,421	67,583	74,764	68,861
	Hosiery—					
775	Women's (including panty hose)	'000 doz pairs	7,518	8,920	n.a.	7,108
	Men's	„	1,831	1,975	2,172	1,709
	Childrens' and infants'	„	1,147	1,244	1,189	891
281.04	Ice, made	'000 tonnes	116	116	126	n.a.
051.61	Ice cream(*f*)	'000 litres	196,522	210,387	215,063	206,857
051.87, 89, 90	Infants', invalids' and health beverages from cows milk(*g*)	'000 kg	26,999	26,882	24,247	33,489
	Ink, printing—					
419.31	News	„	11,243	10,940	9,486	n.a.
419.43–59	Other	„	11,716	13,880	n.a.	n.a.
	Iron and steel—					
442.04, 08	Pig iron	'000 tonnes	6,006	7,021	7,444	7,591
442.80–83	Steel ingots	„	6,480	7,209	7,504	8,017
442.28	Blooms and slabs (*h*)	„	5,569	6,180	6,467	6,260
693.51, 61, 63	Irons, electric (hand, domestic)	'000	593	643	675	781
076.60	Jams (including conserves, jellies, etc.)	'000 kg	34,927	34,769	32,745	30,285
391.04	Lard	„	2,385	2,736	3,207	n.a.
	Lawn mowers—					
699.52, 53	Petrol, rotary	No.	293,350	340,656	395,399	298,753
699.41, 45, 55, 61	Other types(*i*)	„	19,219	15,883	21,769	18,858
453.04	Lead refined(*j*)	'000 tonnes	191	174	201	171

(*a*) Petrol and diesel. Excludes car, motor cycle, truck, tractor, aero, and marine engines. (*b*) Needled (or bonded) felts of jute or jute/hair mixtures (for all purposes). (*c*) Includes wheatmeal for baking and sharps and other flour. (*d*) Excludes grape must. (*e*) Excludes fabric liners for dipped gloves but includes moulded or heat-sealed work gloves. (*f*) Includes ice-cream combined with other confections. Including those aerated milk-based confections which contain 10% or more butterfat. (*g*) Includes malted milk and milk sugar (lactose). (*h*) Primary mills output. (*i*) Petrol cylinder, electric and hand. (*j*) Includes lead content of lead alloys from primary sources, but excludes lead-silver bullion.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS: AUSTRALIA—*continued*

Commodity code	*Article*		*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Leather—					
	Dressed or finished—					
301.43–65	Chrome tanned (including retanned)	'000 m²	6,123	5,489	5,982	n.a.
301.31–37, 83–89	Vegetable tanned, by weight	'000 kg	3,684	3,873	n.a.	n.a.
301.67, 69	Vegetable tanned, by measurement	'000 m²	233	191	165	n.a.
	Lime—					
275.43, 45	Crushed	tonnes	206,327	222,598	239,047	n.a.
479.18	Hydrated	,,	139,181	147,131	163,780	n.a.
479.12	Quick	,,	423,196	447,782	538,721	n.a.
802.21	Lipstick	kg	45,422	41,925	53,006	n.a.
063.11–21, 31	Malt (excluding extract)	'000 kg	372,536	339,243	378,004	440,876
	Margarine—					
121.01	Table	,,	17,599	21,615	25,963	31,582
121.06, 08	Other	,,	54,426	55,972	57,120	55,377
	Mattresses—					
844.22, 25, 27	Inner spring	'000	696	738	749	671
844.42, 45, 47	Rubber	,,	45	34	39	18
844.52–67	Other	,,	332	477	583	513
027.02–76	Meat, canned(*a*)	'000 kg	59,032	51,019	52,903	43,481
	Meters (domestic)—					
702.01	Electricity consumption	'000	215	287	312	308
703.01	Gas consumption	,,	68	65	66	69
703.11	Water consumption	,,	158	167	193	196
	Milk, condensed, concentrated and evaporated—					
051.21, 22	Full cream, coffee and milk, sweetened	'000 kg	16,705	14,635	13,392	14,428
051.26, 27, 052.42	Full cream, unsweetened	,,	47,832	38,293	33,203	34,627
051.28	Skim	,,	11,489	11,943	11,949	11,033
	Milk powder in powered form—					
051.72, 73	Full cream	,,	28,763	37,080	36,991	44,447
051.76–79	Skim	,,	92,680	117,576	143,789	157,651
051.81, 82	Buttermilk or mixed skim and buttermilk	,,	14,528	15,422	16,199	11,544
503.17–32	Motors, electric	'000	3,466	3,680	4,658	4,516
	Motor vehicles, finished—					
581.02–08	Cars	No.	340,122	319,561	331,303	306,007
581.10–16	Station wagons	,,	51,931	50,017	51,028	55,382
582.04	Utilities	,,	34,105	31,411	29,215	29,935
582.06	Panel vans	,,	20,330	25,456	26,715	28,868
582.08–24	Truck and truck-type vehicles	,,	3,357	5,496	4,786	7,653
	Motor vehicles, partly finished—					
581.22–28 582.31, 32	Cars, station wagons, utilities vans	,,	2,244	1,729	1,424	995
582.33–46	Trucks and truck-type vehicles	,,	18,982	20,256	24,943	25,498
589.81–89	Motor vehicle safety belts	'000	3,727	3,139	2,997	n.a.
465.16, 17	Nails	tonnes	24,392	25,259	27,351	22,686
782.03, 04	Neckties	'000 doz	620	616	n.a.	n.a.
	Oatmeal and rolled oats—					
062.61, 63	For porridge, etc.	tonnes	17,247	14,419	19,268	14,092
393 394	Oils and fats, crude—Vegetable	000 kg	66,533	75,390	75,048	n.a.
	Paints, etc.—					
	Architectural and decorative(*b*)—					
	Solvent thinned—					
410.01	Primers and undercoats	'000 litres	13,334	13,139	12,797	11,933
410.03, 05, 07	Finishing coats	,,	29,654	31,957	32,524	30,262
	Water thinned—					
410.11, 13, 15	Plastic latex	,,	24,567	27,241	28,908	28,345
410.17	Other water based	,,	441	377	322	317
410.25	Tinting colours (all types) packed for sale or transfer out	,,	327	407	445	527
	Paper—					
351.11	Newsprint	'000 tonnes	181	199	204	196
351.18–79	Other	,,	526	548	653	571
352.11–33	Paperboard	,,	382	411	444	417
975.04, 09, 11	Perambulators, pushers and strollers	'000	177	197	207	126
479.22	Plaster of paris	tonnes	314,748	341,954	361,189	336,301
479.32, 33	Plaster sheets—Non-acoustic	'000 m²	34,315	39,151	44,105	42,008
334.32, 34, 36, 38	Plywood, 1 mm basis	,,	103,078	114,173	n.a.	n.a.
152.06	Pollard from wheat	'000 tonnes	256	232	242	272

(*a*) Excludes poultry and baby food. (*b*) Excludes heavy duty coatings.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS: AUSTRALIA—*continued*

Commodity code	*Article*		*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Preserves—					
	Fruit					
076.01–50	Canned or bottled	'000 kg	253,791	272,983	213,112	239,406
074.01	Pulp and puree—single strength	"	4,464	3,876	4,708	n.a.
	Vegetables—					
094.02–47	Canned or bottled	"	113,892	105,933	121,940	132,382
092.02, 06, 10, 19	Quick frozen	"	91,624	94,380	93,250	105,540
	Pyjamas—					
774.20, 22, 27, 29	Men's, youth's and boy's (suits only)	'000 doz	468	413	414	345
774.50–59, 64, 66	Women's, maid's and girl's (incl. nightdresses)	"	883	814	853	802
832.65, 85	**Racquet** frames (all types)	"	19,019	19,896	19,952	14,262
643.01–37	Radio receiving sets (including radiograms)	No.	770,343	879,848	n.a.	285,114
	Records (phonograph)—					
646.35, 65	Single play	'000	5,965	5,470	6,050	5,927
646.37, 41, 67, 71	Extended play	"	805	862	676	375
646.43, 45, 73, 75	Long play	"	15,066	15,666	20,212	21,444
657.32, 41	Refrigerators, domestic, electric and gas	"	263	236	274	222
403,404	Resins, plastics and synthetic, for all purposes	'000 tonnes	285	339	386	366
061.67, 69	Rice, polished, unpolished and broken	'000 kg	202,434	216,187	203,536	n.a.
372.70, 72 374.59	Rugs	'000	186	126	133	117
123.18–25	**Sauce**	'000 litres	29,107	27,392	30,434	n.a.
062.04	Semolina	'000 tonnes	24	22	25	25
773.02–09	Shirts (men's, youths' and boys'), collar attached(*a*)	'000 doz	650	700	770	520
653.01	Sink heaters, electric	No.	9,315	9,509	10,463	7,796
671.11–18	Sinks, steel and other (standard size)	"	239,902	253,758	262,275	209,894
805.01–13	Soap, for personal toilet use (*b*)	tonnes	29,028	29,069	31,433	27,071
	Soup—					
122.02, 09	Canned	'000 litres	41,960	48,825	51,202	53,801
122.13, 15	Dry-mix	'000 kg	5,882	6,693	9,048	n.a.
127.11–19	Starch (incl. cornflour)	"	132,666	143,799	164,787	145,169
401.53	Stearine (stearic acid)	"	6,490	5,620	5,854	n.a.
461.20	Steel, constructional, fabricated	tonnes	696,790	651,204	600,138	n.a.
	Stoves, ovens and ranges, domestic cooking—					
661.01–11	Electric(*c*)	No.	227,314	247,460	258,984	254,678
662.26–31, 34, 36, 42, 43	Gas(*d*)	"	89,343	92,996	113,649	106,301
662.01, 03	Solid fuel	"	7,612	6,200	5,150	4,751
	Sugar—					
102.01	Raw	'000 tonnes	2,793	2,811	2,531	n.a.
102.12	Refined	"	664	653	657	729
405.36	Sulphate of ammonia	tonnes	111,107	227,864	246,014	266,483
415.07	Superphosphate(*e*)	'000 tonnes	3,612	4,962	5,288	3,309
803.61	**Talcum** powder	'000 kg	4,738	4,148	4,133	n.a.
	Tallow (including dripping), rendered—					
391.14, 16	Edible	"	89,927	94,892	88,655	n.a.
391.24	Inedible	"	294,602	278,485	230,331	n.a.
643.49–67	Television sets	No.	361,169	396,540	446,988	465,401
645.51–58	Television picture tubes incorp. new screens	"	432,309	355,307	393,287	152,571
	Tiles, roofing—					
475.30	Concrete	'000	196,192	222,970	241,386	200,080
472.12	Terracotta					
	Timber—					
	From native logs—					
331.01–07	Hardwood, etc	'000 m^3	2,582	2,560	2,563	n.a.
331.09–19	Softwood	"	782	848	773	n.a.
331.23, 25	From imported logs	"	9	5	1	n.a.
661.21, 23	Toasters, electric (domestic)	No.	373,399	453,637	547,591	617,621
183.21–28	Tobacco	'000 kg	3,038	2,671	2,399	n.a.
094.51	Tomato juice	'000 litres	15,140	9,786	9,845	13,913
094.53	Tomato paste and puree	"	9,392	9,342	15,367	n.a.
373.58–64	Towels	'000 doz	936	889	1,020	662
671.51–59	Toilet cisterns	No.	430,205	463,828	545,346	449,603
683.03–11	Transformers, chokes and ballasts, for distribution of power and light, etc.	"	14,946	11,754	13,397	17,456
863.01	**Umbrellas**, street and general purpose	No.	731,658	734,814	896,065	n.a.
774	Underwear (men's, women's, children's)	'000 doz	6,728	6,884	8,428	6,457

(*a*) Business or formal. (*b*) Excludes powdered shampoo. (*c*) Includes wall ovens but excludes cooking tops and portable units. (*d*) Upright and elevated (with ovens) including wall ovens, but excluding hotplates, stovettes, etc. (*e*) Includes ammonium phosphate.

QUANTITIES OF PRINCIPAL ARTICLES PRODUCED IN MANUFACTURING ESTABLISHMENTS: AUSTRALIA—*continued*

Commodity code	*Article*		*1971–72*	*1972–73*	*1973–74*	*1974–75*
692.02,04	**Vacuum cleaners (domestic)**	’000	174	209	240	250
	Wash basins—					
671.37	**Earthenware**	"	233	278	292	274
693.02–18	**Washing machines, household, electric**	"	312	340	375	315
	Weatherboards—					
332.12	**Australian timber**	m^3	33,496	35,083	34,148	n.a.
332.14	**Imported timber**	"	5,535	5,944	2,291	n.a.
152.14	**Wheatmeal for stock feed**	’000 tonnes	313	496	621	458
519.01	**Wheelbarrows (metal)**	No.	144,080	169,400	179,841	n.a.
	Wine, beverage—					
172.42	**Fortified**	’000 litres	59,922	54,536	62,353	69,952
172.46	**Unfortified**	"	94,387	115,738	149,448	170,561
341.31–45	**Wood pulp (air dried)**	’000 tonnes	506	532	617	571
242.07–11	**Wool, scoured or carbonised**	tonnes	68,254	59,338	53,687	51,772
242.33,35	**Wool tops, pure**	’000 kg	17,493	19,735	14,240	8,296
	Yarn (including mixtures)—					
364.11–50	**Cotton**	"	27,763	28,216	30,996	24,204
363.47–75	**Woollen**	"	19,147	17,914	17,721	13,780
363.17–31	**Wool worsted**	"	8,665	8,759	7,219	4,232
365.38-65	**Rayon and acetate, spun**	"	5,575	5,088	3,610	1,925
365.90, 366.03, 04, 16, 29, 30, 42, 55, 56, 88, 96, 97	Synthetic (non-cellulosic) fibres spun	"	7,009	11,467	16,521	10,096
457.04	**Zinc, refined(*a*)**	’000 tonnes	274	299	282	243

(*a*) Primary origin only includes small quantities of zinc dust.

Enterprise and Industry Concentration Statistics

Industry statistics shown earlier in this chapter relate to *establishments*. Statistics are also available from the 1968–69 Economic Censuses for *enterprises* engaged in manufacturing industry. A description of the statistics and broad summary tables are given in the Miscellaneous chapter.

Similarly *industry concentration* statistics have been published for 1968–69. These aim to show the extent to which individual enterprise groups dominate particular industries. A description and summary tables of these statistics are also given in the Miscellaneous chapter.

Foreign Ownership and Control in Manufacturing Industry

Summary information on foreign ownership and control in manufacturing industry is shown in Chapter 11. More detailed statistics are available in *Foreign Control in Manufacturing Industry. Study of Large Enterprise Groups*, 1972–73 (*Advance Release*) (12.34), *Foreign Control in Manufacturing Industry. Study of Large Enterprise Groups*, 1972–73 (12.35), *Foreign Ownership and Control in Manufacturing Industry*, 1972–73 (*Advance Release*) (12.37) and *Foreign Ownership and Control in Manufacturing Industry*, 1972–73 (12.38).

CHAPTER 22

RURAL INDUSTRY

This chapter is divided into nine major parts:

Land tenure; Rural land use; Crops; Livestock and livestock products; Beekeeping; Rural improvements, conservation and consumption of fodder; Agricultural machinery on rural holdings; Rural employment; Assistance to, and control of, agriculture.

For more up-to-date and detailed information on the subjects dealt with in this chapter *see* the following mimeographed publications issued by the A.B.S.

Annual publications

Ref. No.	
10.15	*Principal Agricultural Statistics, First Estimate*
10.63	*Principal Agricultural Statistics, Second Estimate*
10.57	*Crop and Fruit Statistics*
10.14	*Livestock Statistics*
10.11	*Fruit Growing Industry*
10.58	*Crop Statistics*
10.59	*Rural Land Use, Improvements, Agricultural Machinery and Labour*
10.36	*Wheat Industry: Estimates of Intended Sowings*
10.52	*Wheat Industry: Estimates of Area Sown*
10.53	*Wheat Industry: Estimates of Production*
10.35	*Wheat Industry*
10.38	*Wool Production and Utilisation*
10.3	*Beekeeping*
10.5	*Dairying Industry*
10.54	*Meat Industry*
10.78	*Mushroom Growing Statistics*
10.79	*Nursery Statistics*
10.24	*Value of Primary Commodities Produced, First Estimate*
10.25	*Value of Primary Commodities Produced, Second Estimate*
10.27	*Value of Primary Commodities Produced, Final*
10.77	*Estimates of Turnover Expenditure and Cash Operating Surplus of Agricultural producers*
10.10	*Apparent Consumption of Foodstuffs and Nutrients*
10.82	*Structural Statistics of the Agricultural Sector*
12.7	*Manufacturing Commodities*

Monthly and quarterly publications

10.6	*Wholemilk Production and Utilisation*
10.16	*Meat Industry*
10.44	*Chicken Hatchings and Poultry Slaughterings*
10.70	*Brokers and Dealers Receivals of Taxable Wool*
10.74	*Livestock Slaughtered and Meat Produced* (*Qtly*)
12.14	*Quarterly Bulletin of Production Statistics*

Particulars of rural holdings classified by size, main type of activity, etc. are published in *Classification of Rural Holdings by Size and Type of Activity* (10.28).

For estimated figures of rural debt to specified lenders for the years 1968–69 to 1972–73 *see* page 545 of this Year Book.

Throughout this chapter yearly periods for area and production of crops relate to years ended 31 March. Other periods in respect of e.g. factory and trade statistics relate to years ended 30 June.

LAND TENURE

Disposal of Crown lands

Land legislation and tenures

The following sections contain figures showing the extent of the different land tenures in the States and Territories, classified under broad headings indicating the nature of the tenure, together with some general descriptive matter. Information in greater detail, descriptions of the land tenure systems of the States and the Territories, and conspectuses of land legislation in force and of the systems of land tenure were provided in Year Book No. 48 and previous issues (*see also* Year Book No. 50, page 85 and List of Special Articles, etc. preceding General Index to this Volume).

Free grants and reservations

Provision exists in all States except Tasmania for the disposal of Crown lands for public purposes by free grants, and in all States for the temporary and or permanent reservation of Crown lands for public purposes. In the Northern Territory any Crown lands not subject to any right of, or contract for, purchase may be resumed for public purposes, and the whole or any portion of the lands resumed may be reserved for that purpose. In the Australian Capital Territory, under the *Seat of Government (Administration) Act* 1910, Crown lands may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act.

AREAS OF CROWN LANDS RESERVED
('000 hectares)

Year(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
1971 . .	6,373	(*b*)3,153	11,589	9,283	36,557	2,679	25,231	..	94,865
1972 . .	6,340	(*b*)3,154	11,567	9,285	39,010	2,688	25,231	9	97,284
1973 . .	6,331	6,776	11,336	9,285	39,099	2,431	26,587	10	101,855
1974 . .	6,096	6,583	11,847	9,290	39,103	2,471	25,243	10	100,643
1975 . .	6,034	6,561	n.a.	9,311	40,061	2,486	25,246	10	n.a.

(*a*) Data for States and Territories other than Queensland is at 30 June; Queensland data is at 31 December. (*b*) Excludes areas set aside for roads.

The purposes for which areas were reserved are given below for the latest year available as set out in the table above.

New South Wales. For travelling stock, 1,985,426 hectares; forest reserves, 521,258 hectares; water and camping reserves, 280,659 hectares; mining reserves, 378,890 hectares; recreation and parks, 318,338 hectares; other reserves, 2,549,516 hectares; total 6,034,087 hectares.

Victoria. Water reserves, 88,665 hectares; forest and timber reserves, 2,354,900 hectares; national parks, 227,320 hectares; water frontages, beds of streams and lakes, 342,535 hectares; native flora and fauna, 59,925 hectares; other reserves (including roads), 3,490,655 hectares; total 6,561,000 hectares.

Queensland. For timber reserves, 666,762 hectares; State forests and national parks, 4,396,310 hectares; Aboriginal reserves, 2,774,928 hectares; streets, surveyed roads and stock routes, 1,835,219 hectares; general reserves, 2,173,509 hectares; total, 11,846,727 hectares.

South Australia. Total area of surveyed roads, railways and other reserves, 9,311,281 hectares including 7,930,215 hectares set apart as Aboriginal reserves.

Western Australia. For State forests, 1,832,124 hectares; timber reserves, 82,684 hectares; other reserves, 38,146,123 hectares; total, 40,060,931 hectares.

Tasmania. For forest reserves, 2,040,000 hectares; national parks and state reserves, 446,000 hectares; total, 2,486,000 hectares.

Northern Territory. For Aboriginal, defence and public requirements, 25,246,000 hectares.

Australian Capital Territory. For public parks and recreation reserves, 10,114 hectares.

Conditional and unconditional purchases of freehold

Crown lands in the States may be disposed of by unconditional purchase at public auction or by certain other forms of purchase (for details *see* Year Book No. 48, pages 91–2). Conditional purchases of various types may also be made. In the Northern Territory only 0.1 per cent of the total area is alienated, the remainder being held under lease or licence, or reserved for various purposes or unoccupied. In the Australian Capital Territory the progressive resumption of alienated land for the development of the Canberra City area has left less than 1.0 per cent of the area still alienated.

Leases and licences

Well over half the area of the States of New South Wales and South Australia and of the Northern Territory and about four-fifths of Queensland are occupied under some form of lease or licence. In Victoria, only about one-tenth of the area is leased or licensed, more than half being alienated; in Western Australia, more than one-third is leased or licensed, most of the remainder being unoccupied; in Tasmania about one-third is leased or licensed, while about one-quarter of the area of the State is occupied by the Crown or unoccupied, and the remainder alienated. Areas leased or licensed in the States are held under Crown lands Acts, closer settlement Acts, mining Acts, etc., and in the Territories under various Ordinances.

Land Acts and Ordinances. The types of lease and licence granted under land legislation cover a wide range, and vary with each State or Territory. The following are examples: grazing or pastoral, settlement and closer settlement, settlement purchase, conditional and unconditional purchase, perpetual and Crown; however, the variations of these forms and the special forms of lease and licence which exist would extend this list considerably. Details of the various types in existence are given in Year Book No. 48, pages 93–4, and some detail is included in the tables on pages 878–81 of Year Book No. 53.

AREAS OCCUPIED UNDER LEASE OR LICENCE OTHER THAN MINING AND FORESTRY
('000 hectares)

Year(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Total*
1971 . . .	44,973	2,240	138,404	60,562	101,328	357	80,588	98	428,550
1972 . .	44,931	2,253	140,404	60,167	102,017	247	80,967	96	431,082
1973 . .	44,663	2,305	134,183	59,914	101,819	212	77,695	84	420,875
1974 . .	44,184	2,467	133,513	60,354	100,572	200	78,375	78	419,743
1975 . .	43,480	2,435	n.a.	60,106	100,928	185	78,368	73	n.a.

(*a*) Data for States and Territories other than Queensland is at 30 June; Queensland data is at 31 December.
(*b*)Leases and licences for all purposes.

Closer settlement and war service settlement

Closer settlement

Particulars of the methods of acquisition and disposal of land for the closer settlement of civilians and returned service personnel (1914–18 War) in the several States are given in issues of the Year Book up to No. 22 (*see* No. 22, pages 163–9), and the results of the operations of the several schemes have appeared in subsequent issues in considerable detail. However, the amalgamation in some States of closer settlement records with those of other authorities has since made it impossible to obtain up-to-date figures for those States and for Australia as a whole. Page 96 of Year Book No. 48 contains particulars as at 30 June 1960 of the areas and costs for those States for which separate information is available.

War Service Land Settlement Scheme

The War Service Land Settlement Scheme provides for the settlement on the land of eligible ex-servicemen from the 1939–45 War and the Korea-Malaya operations. Finance for capital expenditure under the scheme in South Australia, Western Australia and Tasmania and for special loans to New South Wales and Victoria is provided through Loan (War Service Land Settlement) Acts. Finance for other aspects of the scheme in all States is provided by annual parliamentary appropriation. The *States Grants (War Service Land Settlement) Act* 1952 provides that the responsible Commonwealth Government Minister may make grants of financial assistance to the States under such terms as he may from time to time determine. At 30 June 1970, 9,129 farms had been allotted from a total area of 5,640,000 hectares acquired and no further farms are to be provided.

Particulars of expenditure on war service land settlement, to 30 June 1968, are given in Year Book No. 55, pages 716–17.

Alienation and occupation of Crown lands

Detailed particulars of the alienation and occupation of Crown lands in the several States and Territories are given in previous issues of the Year Book up to No. 53 (*see* No. 53, pages 878–81).

The following table provides a summary for each State and Territory, and for Australia, of the alienation and occupation of Crown lands in 1975.

ALIENATION AND OCCUPATION OF CROWN LANDS 1975(*a*)

	Private lands				*Crown lands*				
	Alienated		*In process of alienation*		*Leased or licensed*		*Other(b)*		*Total area*
State or Territory	*'000 hectares*	*Per cent*	*'000 hectares*	*Per cent*	*'000 hectares*	*Per cent*	*'000 hectares*	*Per cent*	*'000 hectares*
N.S.W.	25,868	32.3	1,570	2.0	44,044	55.0	8,661	10.8	80,143
Vic.	13,642	59.9	123	0.5	2,435	10.7	6,561	28.8	22,760
Qld	12,604	7.3	16,434	9.5	133,696	77.4	10,065	5.8	172,800
S.A.	6,692	6.8	98	0.1	60,106	61.1	31,542	32.2	98,438
W.A.	15,165	6.0	4,340	1.7	99,899	39.5	133,358	52.8	252,762
Tas.	2,755	40.3	159	2.3	2,009	29.4	1,910	28.0	6,833
N.T.	79	0.1	..	..	78,368	58.2	56,173	41.7	134,620
A.C.T.(*c*)	..	..	2	0.9	73	30.1	168	69.0	243
Australia	**76,805**	**10.0**	**22,726**	**3.0**	**420,630**	**54.7**	**248,438**	**32.3**	**768,599**

(*a*) Queensland data is at 31 December 1974; Western Australia at 31 December 1975; all other States and Territories at 30 June 1975. (*b*) Occupied by Crown; reserved; unoccupied; unreserved. (*c*) Includes Jervis Bay.

RURAL LAND USE

Area of rural holdings

Statistics relating to the area of rural holdings are derived from the annual Agricultural Census conducted at 31 March each year.

A rural holding has been defined for the purpose of these statistics, as a holding of one hectare or more in extent used for the production of agricultural products (including fruit and vegetables), or for the raising of livestock including poultry) and the production of livestock products. Holdings of less than one hectare on which commercial market gardens, nurseries, poultry farms or hatcheries are operated are also generally included.

RURAL HOLDINGS: AREA
('000 hectares)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71	69,229	15,760	154,693	65,796	114,569	2,631	74,401	136	497,216
1971–72	69,001	15,884	154,404	65,146	114,471	2,607	77,889	133	499,535
1972–73	68,849	15,771	155,136	65,372	113,961	2,592	78,011	124	499,815
1973–74	68,881	15,485	154,506	64,843	114,653	2,561	79,486	106	500,522
1974–75	68,880	15,226	154,155	63,825	115,601	2,492	79,346	93	499,618

Land utilisation on rural holdings

The following table shows the purposes for which the land on the rural holdings referred to in the preceding paragraphs was used.

RURAL HOLDINGS: LAND UTILISATION

('000 hectares)

Year	*Area used for crops(a)*	*Area under sown pastures and grasses*	*Balance of holdings(b)*	*Total area of holdings*
1974–75—				
New South Wales	4,090	5,971	58,818	68,880
Victoria	1,772	6,565	6,889	15,226
Queensland	1,897	3,477	148,782	154,155
South Australia	2,257	3,641	57,928	63,825
Western Australia	3,754	7,850	103,997	115,601
Tasmania	67	921	1,504	2,492
Northern Territory	8	133	79,205	79,346
Australian Capital Territory	1	26	66	93
Australia	**13,845**	**28,585**	**457,188**	**499,618**
1973–74	15,060	27,315	458,147	500,522
1972–73	14,255	26,130	459,430	499,815
1971–72	14,240	27,705	457,590	499,533
1970–71	13,397	28,035	455,784	497,216

(*a*) Excludes (i) duplication on account of area double cropped, (ii) pastures and grasses cut for hay and seed which have been included in Area under sown pastures and grasses, and differs therefore from crop area figures shown later in this chapter. (*b*) Used for intermittent grazing, lying idle, fallow, not suitable for agriculture, etc.

Classification by size and type of activity

Some of the information obtained from the 1968–69 Agricultural Census has been classified by size of principal characteristics (area of holdings, area of sown grasses and clovers, area of selected crops, and numbers of livestock). In addition, all holdings have been classified according to type of activity. Tables showing this information, for statistical divisions and States, and an outline of the methods used have been published in a series of bulletins *Classification of Rural Holdings by Size and Type of Activity*, 1968–69. Similar information was published in a series of bulletins for the years 1959–60 and 1965–66. Classifications of holdings by size of principal characteristics are available for each State for the years 1947–48, 1949–50 and 1955–56. Information for the year 1973–74 is available in the mimeograph bulletin *Rural Land Use, Improvements, Agricultural Machinery and Labour* (Ref. No. 10.59) and in *Classification of Rural Holdings by Size and Type of Activity*, 1973–74 (Ref. No. 10.28).

CROPS

In this section statistics relating to crop areas and production are obtained from the annual Agricultural Census. In most instances, the figures shown relate to 1974–75.

The census returns are collected in all States, the Northern Territory and the Australian Capital Territory, at 31 March each year, and relate mainly to crops sown in the previous twelve months. Where harvests are not completed by March (e.g. potatoes), provision is made in some States for a special collection after the harvest is completed and in others for the inclusion of the total estimated yield expected from the complete harvest. In cases where additional data are available from marketing authorities or other sources these are used in conjunction with the annual census returns. The statistics published in this section are therefore shown in 'agricultural' years. For most purposes there will be little error involved in considering them as applying to years ended 30 June.

Progress of cultivation

The following table shows the area of crops in each of the States and Territories of Australia at ten-yearly intervals since 1860–61 and during each of the twelve seasons 1963–64 to 1974–75.

AREA OF CROPS(*a*): 1860–61 TO 1974–75
('000 hectares)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1860–61	100	157	2	145	10	62	. .	. .	475
1870–71	156	280	21	325	22	64	. .	. .	868
1880–81	245	627	46	846	26	57	. .	. .	1,846
1890–91	345	822	91	847	28	64	. .	. .	2,197
1900–01	990	1,260	185	959	81	91	. .	. .	3,567
1910–11	1,370	1,599	270	1,112	346	116	. .	. .	4,813
1920–21	1,807	1,817	316	1,308	730	120	. .	1	6,099
1930–31	2,756	2,718	463	2,196	1,939	108	1	2	10,184
1940–41	2,580	1,808	702	1,722	1,630	103	. .	2	8,546
1950–51	1,927	1,836	841	1,543	1,882	117	n.a.	2	8,148
1960–61	3,255	2,363	1,237	2,185	2,781	144	1	3	11,969
1963–64	3,641	2,469	1,483	2,418	2,798	154	1	3	12,968
1964–65	4,182	2,621	1,605	2,414	3,037	163	2	4	14,028
1965–66	3,663	2,517	1,667	2,440	3,513	156	2	3	13,961
1966–67	5,027	2,738	1,864	2,626	3,568	180	2	4	16,007
1967–68	4,590	2,208	1,883	2,191	3,592	106	6	2	14,578
1968–69	5,509	2,529	2,071	2,596	3,838	110	6	3	16,665
1969–70	4,999	2,212	2,208	2,290	3,912	98	6	2	15,728
1970–71	3,967	1,732	1,791	1,998	3,826	80	2	1	13,397
1971–72	4,185	1,934	2,017	2,278	3,751	66	7	1	14,240
1972–73	4,328	1,935	1,960	2,084	3,855	80	12	1	14,255
1973–74	4,628	1,980	1,787	2,451	4,133	74	5	1	15,060
1974–75	4,090	1,772	1,897	2,257	3,754	67	8	1	13,845

(*a*) The classification of crops was revised in 1971–72 and adjustments made to statistics back to 1967–68. After 1966–67 lucerne for green feed, hay and seed, and pasture cut for hay are excluded.

Distribution of crops

The wide range of climatic and soil conditions over the agricultural regions of Australia has resulted in a diversity of crops being grown throughout the country. Generally, cereal crops (excluding rice and sorghum) are grown in all States over wide areas, while other crops are confined to specific locations in a few States.

AREA OF CROPS, 1974-75

(hectares)

Crop	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Cereals for grain—									
Barley—									
2 row	237,293	238,272	142,771	679,811	305,463	11,191	..	..	1,614,801
6 row	89,303	4,680	13,548	20,854	81,535	829	..	..	210,749
Total	*326,596*	*242,952*	*156,319*	*700,665*	*386,998*	*12,020*	..	..	*1,825,550*
Canary seed	626	54	5,912	179	..	..	..	..	6,771
Grain sorghum	176,209	85	328,886	..	1,674	..	4,235	..	511,089
Maize	22,177	543	28,675	(*a*)	(*a*)	..	..	..	(*b*)51,395
Oats	269,913	197,807	25,406	134,861	262,347	6,069	..	130	896,533
Panicum and millet	807	1,880	19,418	..	..	..	..	..	22,105
Rice	72,925	..	2,637	..	(*a*)	..	(*a*)	..	(*b*)75,562
Rye	1,765	1,750	(*a*)	10,175	2,483	5	..	..	(*b*)16,178
Wheat	2,646,336	1,140,653	488,500	1,220,430	2,809,883	1,535	..	204	8,307,541
Legumes mainly for grain—									
Beans—									
Navy	280	..	3,349	..	..	101	..	..	3,730
Soy	12,788	108	33,013	..	..	..	..	..	45,909
Peas—									
Cow, field and poona	1,391	1,810	1,584	11,593	575	1,439	..	..	18,392
Other(*c*)	1,065	1,224	..	4,077	118,607	170	..	..	125,143
Crops for hay—									
Barley	1,591	1,302	695	5,805	3,085	191	..	..	12,669
Oats	19,305	38,250	3,353	34,951	52,880	1,381	..	8	150,128
Rye	255	1,002	..	229	77	257	..	..	1,820
Wheat	15,338	5,440	1,005	9,832	15,477	94	..	..	47,186
Other	158	121	2,645	..	1,251	3	34	..	4,212
Crops for green feed or silage—									
Rye	2,131	350	(*a*)	1,641	1,175	451	..	..	(*b*)5,748
Wheat	25,282	4,003	15,874	1,223	5,417	264	..	..	52,063
Forage sorghum	24,000	882	50,885	..	1,271	..	..	..	77,038
Barley	29,118	3,432	19,331	10,461	12,795	708	..	..	75,845
Vegetables for animal feed	5,158	5,311	1,639	651	245	7,240	87	..	20,331
Grain sorghum	..	477	25,665	..	158	..	51	..	26,351
Maize	3,810	485	2,490	14	133	19	..	..	6,951
Oats	208,819	21,446	209,719	44,998	51,468	12,217	..	200	548,867
Other	5,510	7,387	15,318	441	2,819	5,973	2,798	..	40,246
Sugar cane—									
Cut for crushing	9,911	..	243,231	..	..	..	..	..	253,142
Cut for plants	275	..	5,959	..	..	..	..	..	6,234
Other land under sugar cane	8,252	..	29,223	..	..	..	..	..	37,475
Tobacco	898	3,926	4,424	..	..	..	..	..	9,248
Cotton	27,511	..	7,386	..	3,642	..	..	..	38,539
Peanuts	204	..	23,742	..	185	..	(*a*)	..	(*b*)24,131
Linseed	18,237	4,924	8,543	3,165	693	..	..	..	35,562
Rapeseed	4,733	3,707	..	1,238	2,170	..	..	..	11,848
Safflower	5,487	2,813	27,575	363	(*a*)	..	..	..	36,238
Sunflower	94,085	8,013	104,923	2,417	158	36	..	..	209,632
Fruit—									
Tree	25,741	21,508	11,584	16,539	7,591	4,169	17	18	87,167
Small and berry	60	254	94	81	16	579	..	..	1,084
Other	5,796	22	8,471	..	215	..	5	..	14,509
Grapevines	14,463	22,348	1,537	30,366	2,602	..	..	..	71,316
Vegetables	27,745	30,190	24,942	10,177	5,797	11,521	129	53	110,554
All other crops—									
Nurseries	1,036	1,044	477	193	170	65	4	3	2,992
Broom millet	568	26	(*a*)	..	..	..	..	..	(*b*)594
Hops	..	478	..	..	(*a*)	662	..	..	(*b*)1,140
Other crops n.e.i.	1,128	943	5,623	403	449	1,490	651	..	10,687
Total area of crops (excluding pastures)	**4,119,483**	**1,778,949**	**1,950,053**	**2,257,168**	**3,754,506**	**68,659**	**8,023**	**616**	**13,937,457**
Area of above double-cropped	29,682	6,553	52,350	221	573	1,883	5	10	91.277
Total area used for crops (excluding pastures)	*4 089,801*	*1,772,396*	*1,897,703*	*2,256,947*	*3,753,933*	*66,776*	*8,018*	*606*	*13,846,180*
Pastures and grasses cut for hay	221,850	459,494	40,999	138,995	90,853	78,557	2,140	478	1,033,366
Pastures and grasses harvested for seed	26,045	8,324	10,112	30,611	22,878	2,219	273	..	100,462
Total area used for crops (including pastures)	**4,337,696**	**2,240,214**	**1,948,814**	**2,426,553**	**3,867,664**	**147,552**	**10,431**	**1,084**	**14,980,008**

(*a*) Not available for publication; included in "Other crops n.e.i.". (*b*) Incomplete; *see* footnotes to individual States. (*c*) Mainly lupins for processing.

AREA OF CROPS: AUSTRALIA
(hectares)

Crop	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Cereals for grain—					
Barley—					
2 Row	1,531,534	2,037,655	1,784,802	1,597,968	1,614,801
6 Row	468,523	497,765	355,100	296,506	210,749
Total	*2,000,058*	*2,535,421*	*2,139,902*	*1,894,474*	*1,825,550*
Canary seed	8,869	6,260	6,909	9,954	6,771
Grain sorghum	552,106	638,392	697,162	539,671	511,089
Maize	85,635	78,193	59,259	45,606	51,395
Oats	1,553,169	1,240,586	995,053	1,182,180	896,533
Panicum and millet	49,158	23,952	27,159	39,642	22,105
Rice	40,721	40,403	45,150	67,502	75,562
Rye	40,707	41,458	28,198	28,062	16,178
Wheat	6,478,418	7,137,852	7,604,082	8,948,257	8,307,541
Legumes mainly for grain—					
Beans—					
Navy	4,624	8,412	9,516	4,523	3,730
Soy	7,326	18,019	27,963	40,849	45,909
Peas—					
Cow, field and poona	32,211	36,187	22,645	18,558	18,392
Other	270	(a)34,447	(a)46,519	(a)67,080	(a)125,143
Crops for hay—					
Barley	23,375	19,680	32,713	21,296	12,669
Oats	236,533	234,486	291,483	227,955	150,128
Rye	2,887	1,780	1,526	2,689	1,820
Wheat	75,782	80,501	121,365	66,143	47,186
Other	10,239	4,610	6,173	6,878	4,212
Crops for green feed or silage—					
Rye	10,429	8,984	8,620	8,959	5,748
Wheat	77,327	34,829	48,262	50,701	52,063
Forage sorghum	168,359	110,537	168,274	114,840	77,038
Grain sorghum		28,346	24,398	33,225	26,351
Vegetables for animal feed	14,267	47,184	52,114	32,208	20,331
Barley	116,360	94,404	107,766	110,032	75,845
Maize	5,379	7,396	7,677	7,274	6,951
Oats	884,511	608,737	724,242	689,774	548,867
Other	119,187	57,515	62,335	50,301	40,246
Sugar cane—					
Cut for crushing	220,521	233,737	241,699	225,854	253,142
Cut for plants	5,232	5,191	5,045	5,028	6,234
Other land under sugar cane	50,347	38,787	36,520	50,310	37,475
Tobacco	10,900	10,045	9,598	9,278	9,248
Cotton	34,534	39,649	43,616	41,716	38,539
Peanuts	38,584	33,752	29,136	25,932	24,131
Linseed	41,626	19,923	16,300	17,777	35,562
Rapeseed	42,887	86,950	77,142	16,843	11,848
Safflower	27,674	33,809	10,624	12,311	36,238
Sunflower	75,716	295,011	241,840	150,578	209,632
Fruit—					
Tree	104,053	104,335	97,632	91,856	87,167
Small and berry	1,224	1,261	1,215	1,158	1,084
Other	17,742	17,492	16,653	15,789	14,509
Grapevines	63,782	66,817	68,547	69,988	71,316
Vegetables	107,611	116,899	110,947	105,475	110,554
All other crops—					
Nurseries	2,366	2,499	2,599	2,913	2,992
Broom millet	558	516	395	403	594
Hops	893	935	1,069	1,211	1,140
Other crops n.e.i.	8,578	8,598	8,627	8,003	106
Total area of crops (excluding pastures)	**13,452,735**	**14,294,776**	**14,385,669**	**15,161,056**	**13,937,457**
Area of above double cropped	55,340	54,611	130,992	102,031	91,277
Total area used for crops (excluding pastures)	*13,397,395*	*14,240,165*	*14,254,677*	*15,059,025*	*13,846,180*
Pastures and grasses cut for hay	1,011,437	1,147,619	924,414	1,311,858	1,033,366
Pastures and grasses harvested for seed	129,028	107,440	85,898	117,035	100,462
Total area for crops (including pastures)	**14,537,860**	**15,495,224**	**15,264,989**	**16,487,918**	**14,980,008**

(*a*) Mainly lupins for processing; not collected separately prior to 1971–72.

Production and yield per hectare of crops

PRODUCTION OF CROPS (EXCLUDING PASTURES, FRUIT AND VEGETABLES), 1974–75

Crop		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Cereals for grain—										
Barley—										
2 row	'000 tonnes	297	314	274	1,108	252	25	..	..	2,272
6 row	,,	110	5	23	26	75	2	..	..	241
Total	,,	*408*	*319*	*297*	*1,134*	*327*	*27*	..	..	*2,513*
Canary seed	,,	1	..	6	..	..	..	..	..	6
Grain sorghum	,,	257	..	634	..	3	..	7	..	901
Maize	,,	60	2	72	(*a*)	(*a*)	..	..	..	(*b*)133
Oats	,,	293	186	28	112	250	5	..	..	874
Panicum and millet	,,	..	2	19	..	..	..	..	..	22
Rice	,,	376	..	12	..	..	..	(*a*)	..	(*b*)388
Rye	,,	1	1	(*a*)	2	1	..	..	..	(*b*)5
Wheat	,,	3,809	2,091	692	1,486	3,277	2	..	..	11,357
Legumes mainly for grain—										
Beans—										
Navy	tonnes	167	..	2,599	..	..	63	..	..	2,829
Soy	,,	21,102	79	52,542	..	..	..	..	..	73,723
Peas—										
Cow, field and poona	,,	912	1,961	536	13,364	398	2,959	..	..	20,130
Crops for hay—										
Barley	,,	3,239	3,589	1,460	16,265	8,469	946	..	..	33,968
Oats	,,	50,982	136,353	10,022	117,281	160,415	5,722	..	23	480,798
Rye	,,	474	3,724	..	520	237	1,242	..	..	6,197
Wheat	,,	42,713	15,220	2,514	33,790	40,948	372	..	..	135,557
Other	,,	315	457	7,834	..	3,485	6	60	..	12,157
Total	,,	*97,723*	*159,343*	*21,830*	*167,856*	*213,554*	*8,288*	*60*	*23*	*668,677*
Sugar cane cut for crushing	'000 tonnes	997	..	19,421	..	..	..	..	..	20,418
Tobacco	'000 kg	1,369	6,086	8,007	..	..	..	..	..	15,462
Cotton	,,	78,812	..	17,909	..	6,603	..	..	..	103,324
Peanuts	tonnes	494	..	31,323	..	152	..	..	..	31,969
Linseed	,,	14,997	3,812	10,720	3,162	358	..	..	..	33,049
Rapeseed	,,	3,696	2,288	..	1,781	768	..	..	..	8,533
Safflower	,,	2,005	1,269	26,949	279	(*a*)	..	..	..	30,502
Sunflower	,,	37,549	4,817	68,402	2,576	9	22	..	..	113,375
Grapes	,,	132,826	287,508	5,811	290,561	11,134	..	..	..	727,840
Broom millet(*c*)	,,	335	16	(*a*)	..	..	..	..	..	(*b*)351
Hops	'000 kg	..	831	..	..	(*a*)	1,439	..	..	(*b*)2,270

(*a*) Not available for publication. (*b*) Incomplete; *see* footnotes to individual States. (*c*) Comprises grain and fibre; not shown separately.

PRODUCTION OF CROPS (EXCLUDING PASTURES, FRUIT AND VEGETABLES)

Crop		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Cereals for grain—						
Barley—						
2 row	'000 tonnes	1,783	2,571	1,441	2,076	2,272
6 row	,,	567	495	286	322	241
Total	,,	*2,351*	*3,065*	*1,727*	*2,397*	*2,513*
Canary seed	,,	5	4	4	7	6
Grain sorghum	,,	1,298	1,228	1,018	1,061	901
Maize	,,	212	214	139	106	133
Oats	,,	1,613	1,275	736	1,107	874
Panicum and millet	,,	57	26	26	35	22
Rice	,,	300	248	309	409	388
Rye	,,	22	22	9	8	5
Wheat	,,	7,890	8,606	6,590	11,987	11,357
Legumes mainly for grain—						
Beans—						
Navy	tonnes	1,121	6,504	1,799	2,539	2,829
Soy	,,	9,202	33,629	37,937	62,541	73,723
Peas—						
Cow, field and poona	,,	33,130	38,979	15,315	18,425	20,130
Crops for hay—						
Barley	,,	68,607	62,926	68.665	55,360	33,968
Oats	,,	925,455	893,317	831,416	760,062	480,798
Rye	,,	13,573	7,817	4,520	10,474	6,197
Wheat	,,	260,147	265,408	300,599	191,231	135,557
Other	,,	6,054	17,075	18,869	17,138	12,157
Total	,,	*1,273,836*	*1,246,543*	*1,224,069*	*1,034,265*	*668,677*
Sugar cane cut for crushing	'000 tonnes	17,645	19,391	18,928	19,278	20,418
Tobacco	'000 kg	17,128	16,015	15,421	14,886	15,462
Cotton	,,	56,751	131,971	96,641	86,393	103,324
Peanuts	tonnes	31,123	46,060	38,496	29,208	31,969
Linseed	,,	30,805	10,229	10,688	14,324	33,049
Rapeseed	,,	33,619	54,614	25,037	10,598	8,533
Safflower	,,	10,456	15,398	4,173	6,860	30,542
Sunflower	,,	58,049	147,531	102,069	84,324	113,375
Grapes	,,	547,399	831,879	598,365	552,383	727,840
Broom millet—						
Grain	,,	113	76	94	296	351
Fibre	,,	327	367	319		
Hops	'000 kg	1,706	1,847	2,113	2,864	2,270

YIELD PER HECTARE OF CROPS (EXCLUDING PASTURES, FRUIT AND VEGETABLES), AUSTRALIA

Crop		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Cereals for grain—						
Barley—						
2 row	tonnes	1.164	1.262	0.807	1.299	1.407
6 row	,,	1.211	0.994	0.806	1.085	1.143
Total	,,	*1.175*	*1.209*	*0.807*	*1.265*	*1.377*
Canary seed	,,	0.578	0.635	0.554	0.724	0.923
Grain sorghum	,,	2.350	1.924	1.460	1.965	1.762
Maize	,,	2.471	2.736	2.343	2.320	2.594
Oats	,,	1.038	1.028	0.740	0.937	0.975
Panicum and millet	,,	1.165	1.080	0.974	0.880	0.976
Rice	,,	7.363	6.134	6.835	6.056	5.141
Rye	,,	0.544	0.529	0.305	0.268	0.304
Wheat	,,	1.218	1.206	0.846	1.340	1.367
Legumes mainly for grain—						
Beans—						
Navy	,,	0.242	0.773	0.189	0.561	0.758
Soy	,,	1.256	1.866	1.357	1.531	1.606
Peas—						
Cow, field and poona	,,	1.085	1.077	0.676	0.993	1.094
Crops for hay—						
Barley	,,	2.935	3.197	2.099	2.599	2.681
Oats	,,	3.913	3.810	2.852	3.334	3.203
Rye	,,	4.701	4.392	2.962	3.895	3.405
Wheat	,,	3.443	3.297	2.477	2.891	2.873
Other	,,	3.458	3.704	3.057	2.490	2.886
Sugar cane cut for crushing	,,	80.014	82.959	78.314	85.356	80.657
Tobacco	'000 kg	1.571	1.594	1.607	1.604	1.672
Cotton	,,	1.643	3.328	2.216	2.071	2.681
Peanuts	tonnes	0.807	1.365	1.321	1.126	1.325
Linseed	,,	0.740	0.513	0.656	0.806	0.929
Rapeseed	,,	0.784	0.628	0.325	0.629	0.720
Safflower	,,	0.338	0.455	0.393	0.551	0.839
Sunflower	,,	0.780	0.501	0.422	0.560	0.541
Grapes (*a*)	,,	10.266	14.721	10.014	7.815	10.209
Broom millet—						
Grain	,,	0.210	0.147	0.238	0.761	0.591
Fibre	,,	0.586	0.711	0.808		
Hops	'000 kg	1.910	1.975	1.977	2.365	1.991

(*a*) Yield per bearing hectare only.

Value of crop production

Further reference to the value of crop production and other industries in Australia as well as a brief explanation of the terms used may be found in Chapter 31, Miscellaneous.

GROSS VALUE OF CROPS, 1974-75
($'000)

Crop	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Cereals for grain—									
Barley	35,701	32,674	32,860	119,305	33,822	2,502	..	..	256,864
Canary seed	176	4	1,319	39	..	..	..	..	1,538
Grain sorghum	24,194	17	51,843	..	176	..	(*a*)	..	(*c*)76,230
Maize	5,227	171	6,254	..	(*a*)	..	..	..	(*c*)11,652
Oats	18,355	11,991	2,960	7,832	18,045	426	..	10	59,619
Panicum and millet	89	..	2,003	..	..	..	..	..	2,092
Rice	34,512	..	1,379	..	(*a*)	..	(*a*)	..	(*c*)35,891
Rye	101	69	(*b*)	116	83	..	..	..	(*c*)369
Wheat	420,159	231,457	79,276	163,986	361,294	242	..	27	1,256,441
Total cereals for grain	*538,515*	*276,383*	*177,894*	*291,278*	*413,421*	*3,170*	*553*	*37*	*1,701,251*
Legumes mainly for grain	4,339	422	10,365	2,269	74	525	..	..	17,994
Crops for hay—									
Oats	1,407	3,777	200	4,153	4,703	366	..	1	14,607
Wheat	1,257	282	50	1,197	1,347	24	..	..	4,157
Other	113	121	352	594	300	139	2	..	1,621
Total crops for hay	*2,777*	*4,180*	*603*	*5,944*	*6,350*	*530*	*2*	*1*	*20,387*
Sugar cane—									
Cut for crushing	17,507	..	473,189	..	..	..	..	..	490,696
Cut for plants	..	..	7,082	..	..	..	..	..	7,082
Tobacco (dried leaf)	4,349	18,119	26,544	..	..	..	..	..	49,012
Cotton	21,028	..	6,490	..	1,752	..	..	..	29,270
Peanuts	203	..	11,747	..	56	..	..	..	12,006
Linseed	3,347	781	2,735	533	57	..	..	..	7,453
Rapeseed	848	515	..	405	125	..	..	..	1,893
Safflower	419	292	6,755	45	(*b*)	..	..	..	(*c*)7,511
Sunflower	8,593	1,055	13,778	578	(*b*)	3	..	..	(*c*)24,007
Fruit—									
Tree	65,547	55,711	23,071	38,751	17,112	14,910	27	11	215,140
Small and berry	742	1,050	1,156	1,467	293	1,471	..	..	6,179
Other	20,920	50	22,508	..	1,768	..	39	..	45,285
Grapevines	21,375	37,453	2,989	37,502	2,072	..	..	..	101,391
Vegetables	58,558	65,507	60,852	36,576	19,973	15,071	147	186	256,870
All other crops—									
Nurseries	13,369	4,202	5,831	5,176	3,975	884	24	16	33,477
Hops	..	1,740	..	..	(*b*)	1,238	..	..	(*c*)2,978
Other crops n.e.i.	1,572	1,431	3,386	122	6,539	939	..	..	13,989
Total crops (excl. pastures and grasses)	*784,008*	*468,891*	*856,975*	*420,665*	*473,568*	*38,741*	*793*	*252*	*3,043,893*
Pastures and grasses—									
Cut for hay—									
Lucerne	22,545	7,825	9,019	2,172	400	903	10	63	42,937
Other	12,741	55,019	1,575	6,842	7,394	9,567	131	24	93,293
Total cut for hay	*35,286*	*62,844*	*10,594*	*9,014*	*7,794*	*10,470*	*140*	*87*	*136,229*
Harvested for seed—									
Lucerne	832	62	2	1,623	54	8	..	..	2,581
Clovers—									
Subterranean	1,002	203	(*b*)	603	1,531	(*d*)	..	..	(*c*)3,339
Other	32	22	(*b*)	841	213	(*e*)33	..	..	(*c*)1,141
Other n.e.i.	1,480	1,350	605	2,025	497	228	27	..	6,212
Total harvested for seed	*3,344*	*1,637*	*608*	*5,092*	*2,294*	*269*	*27*	..	*13,271*
Total pastures and grasses	*38,630*	*64,481*	*11,202*	*14,106*	*10,088*	*10,739*	*168*	*87*	*149,501*
Total crops	**822,638**	**533,372**	**868,177**	**434,771**	**483,656**	**49,480**	**960**	**339**	**3,193,393**

(*a*) Not available for publication; included in "Total cereals for grain". (*b*) Not available for publication; included in "other crops n.e.i." (*c*) Incomplete; *see* footnotes to individual States. (*d*) Included in "Other Clovers". (*e*) Includes "Subterranean Clovers".

GROSS VALUE OF CROPS, AUSTRALIA
($'000)

Crop	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Cereals for grain—					
Barley	110,789	124,177	90,876	190,482	256,864
Canary seed	481	398	570	1,260	1,538
Grain sorghum	57,382	51,092	58,957	80,398	76,230
Maize	10,393	10,375	8,684	8,956	11,652
Oats	54,283	37,391	31,540	66,801	59,619
Panicum and millet	3,107	1,549	2,290	3,802	2,092
Rice	13,720	11,942	24,995	50,450	35,891
Rye	1,048	817	481	510	369
Wheat	403,550	462,555	356,572	1,311,935	1,256,441
Total cereals for grain	*654,752*	*700,297*	*574,965*	*1,715,048*	*1,701,251*
Legumes mainly for grain	4,550	9,548	8,710	18,901	17,994
Crops for hay—					
Oats	17,390	15,065	23,849	22,083	14,607
Wheat	4,862	4,708	8,510	5,496	4,157
Other	2,179	1,566	2,739	2,309	1,621
Total crops for hay	*24,431*	*21,339*	*35,100*	*29,885*	*20,387*
Sugar cane—					
Cut for crushing	173,300	207,388	230,208	218,875	490,696
Cut for plants	3,248	3,429	3,966	3,453	7,082
Tobacco (dried leaf)	42,528	40,995	37,896	42,396	49,012
Cotton	13,293	30,117	32,625	26,636	29,270
Peanuts	7,998	12,234	10,539	10,885	12,006
Linseed	3,522	1,037	1,044	3,062	7,453
Rapeseed	2,944	5,120	2,916	1,480	1,893
Safflower	984	1,440	469	1,036	7,511
Sunflower	7,340	16,237	15,366	19,402	24,007
Fruit—					
Tree	163,220	149,395	176,476	178,196	215,140
Small and berry	4,537	4,075	5,004	4,739	6,179
Other	31,727	32,713	42,040	34,323	45,285
Grapevines	45,815	66,306	64,871	83,205	101,391
Vegetables	167,185	158,379	181,420	239,685	256,870
All other crops—					
Nurseries	19,828	21,702	23,184	26,740	33,477
Hops	3,133	3,621	4,263	5,174	2,978
Other crops, n.e.i.	2,364	5,659	3,979	4,951	13,989
Total crops (excluding pastures and grasses)	*1,376,701*	*1,491,032*	*1,455,042*	*2,668,074*	*3,043,893*
Pastures and grasses—					
Cut for hay—					
Lucerne	38,645	31,504	42,144	53,086	42,937
Other	52,719	54,533	61,328	105,331	93,293
Total cut for hay	*91,364*	*86,037*	*103,472*	*158,418*	*136,229*
Harvested for seed—					
Lucerne	2,037	2,043	3,084	4,115	2,581
Clovers—					
Subterranean	1,525	1,142	2,591	4,310	3,339
Other	524	636	656	1,481	1,141
Other, n.e.i.	5,274	4,194	4,877	9,698	6,212
Total harvested for seed	*9,360*	*8,016*	*11,209*	*19,603*	*13,271*
Total pastures and grasses	*100,724*	*94,053*	*114,681*	*178,022*	*149,501*
Total crops	**1,477,425**	**1,585,084**	**1,569,723**	**2,846,096**	**3,193,393**

Values of crop production in the various States and Territories are shown in the following table.

GROSS AND LOCAL VALUES OF CROP PRODUCTION STATES AND TERRITORIES, 1974-75
($'000)

State or Territory	*Gross production valued at principal markets*	*Marketing costs*	*Local value of production*
New South Wales	822,638	114,725	707,913
Victoria	533,372	71,544	461,828
Queensland	868,177	64,686	803,491
South Australia	434,771	34,517	400,254
Western Australia	483,656	52,766	430,890
Tasmania	49,480	9,739	39,741
Northern Territory	960	..	960
Australian Capital Territory	339	49	290
Australia	**3,193,393**	**348,026**	**2,845,367**

Wheat

Wheat is grown on a large scale in all States except Tasmania, and is the most important crop in Australia in terms of area, production and exports. The present limits of the wheat belt have been established after considerable fluctuation over the last five decades, the latest decade being one of considerable expansion.

Wheat standards

A description of the F.A.Q. (fair average quality) standard of wheat is given in issues of the Year Book up to No. 53, however for the 1974–75 Season the term F.A.Q. was replaced with the description Australian Standard White (A.S.W.). In recent years the practice of segregation has been widely employed to enhance the marketability of Australian wheat. For the Season 1974–75 this resulted in 19 separate grades of wheat being available for export. Each reflects the climatic and growing characteristics of its region of origin and also the particular characteristics of the varieties of wheat cultivated.

For each grade, samples of wheat are obtained each year and each mixed to give the representative sample of that grade. From these samples, which are representative of all the wheat of a particular classification grown in that region, standards for each grade are established and expressed in kilograms per hectolitre. This standard is used as the basis for sales of each grade and varies from year to year and from State to State. Following is a table showing the standard weight of the main wheat varieties over a five year period.

AUSTRALIAN STANDARD WEIGHTS FOR PRINCIPAL GRADES

(*Source:* Australian Wheat Board)

(kilograms per hectolitre)

Class and grade	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Australian Prime Hard—					
New South Wales	78.6	79.2	78.0	(*a*)77.0	(*a*)79.8
Queensland	79.6	78.6	80.2	76.3	82.3
Australian Hard—					
New South Wales Northern(*b*)	78.6	79.6	81.5	76.4	79.5
New South Wales Southern	(*c*)	79.2	81.5	77.6	80.0
Queensland	78.6	(*c*)	76.2	(*c*)	80.5
South Australia	77.7	76.8	80.7	77.0	78.0
Western Australia	(*c*)	(*c*)	78.6	79.0	79.1
A.S.W. (F.A.Q.)—					
New South Wales South Western	77.4	78.3	80.5	76.0	80.0
Victoria	81.1	80.5	82.3	77.6	81.2
South Australia	78.6	78.3	81.6	76.0	77.0
Western Australia	79.9	79.9	78.6	77.8	79.1
Australian Soft—					
Victoria	(*c*)	79.9	83.5	(*c*)	80.5

(*a*) Minimum protein 14%. (*b*) No. 1 grade only. (*c*) Not determined.

The several A.S.W. grades, while possessing some characteristics in common, vary in protein content, milling characteristics, and dough qualities, and all are distinct grades. Similarly, the prime hard, hard and soft grades are individual grades segregated on the basis of specific quality characteristics.

In a normal season Australia produces a full range of wheats for all purposes from high protein hard wheats to low protein soft wheats.

Bulk handling and storage of wheat

Bulk handling is general and has been in operation in all States for a considerable time. The bodies concerned with the administration of bulk handling in the various States are: Grain Elevators Board of New South Wales, Victorian Grain Elevators Board, State Wheat Board (Queensland), South Australian Co-operative Bulk Handling Ltd, Co-operative Bulk Handling Ltd (Western Australia), and the Tasmanian Grain Elevators Board.

WHEAT: TOTAL CAPACITY OF BULK HANDLING FACILITIES(*a*)

(*Source:* Bulk handling authorities in the various States, *see* above)

('000 tonnes)

	30 November				
State	*1971*	*1972*	*1973*	*1974*	*1975*
New South Wales	5,855	5,765	5,783	5,780	5,883
Victoria(*b*)	3,884	3,884	3,893	3,782	3,817
Queensland	1,129	1,189	1,265	1,249	1,268
South Australia	2,555	2,545	2,595	2,626	2,629
Western Australia	5,851	5,898	6,556	7,059	7,137
Tasmania	29	29	29	29	31
Australia	**19,303**	**19,310**	**20,121**	**20,525**	**20,765**

(*a*) Includes terminals, sub-terminals, country installations, and temporary storage. (*b*) Includes storage in southern New South Wales operated by the Victorian Grain Elevators Board.

Rural holdings growing wheat for grain

Particulars of the number of rural holdings growing wheat for grain during each of the years 1970–71 to 1974–75 are shown in the following table. A farm worked on the share system or as a partnership is included as one holding only.

NUMBER OF RURAL HOLDINGS GROWING WHEAT FOR GRAIN(*a*)

State or Territory	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales	18,537	18,723	17,777	18,220	16,179
Victoria	9,669	10,273	10,002	9,524	9,157
Queensland	2,816	4,503	3,439	4,258	4,487
South Australia	8,548	8,997	8,578	9,196	8,522
Western Australia	8,677	8,559	8,334	8,211	7,899
Tasmania	403	160	147	204	143
Australian Capital Territory	9	8	8	7	5
Australia	**48,659**	**51,223**	**48,285**	**49,620**	**46,392**

(*a*) Prior to 1973–74, comprised holdings approximately 8 hectares and over.

There is in Australia a widespread combination of wheat growing with other rural activities. This is illustrated, for all States and for Australia, in respect of the 1968–69 season, in a series of statistical bulletins *Classification of Rural Holdings by Size and Type of Activity*, 1968–69, Nos 1 to 7. These publications also contain details of numbers of rural holdings classified according to area of wheat for grain. Data for 1973–74 may be obtained from the 1974–75 issue of *Rural Land Use, Improvements, Agricultural Machinery and Labour* (10.59) and from *Classification of Rural Holdings by size and type of activity*, 1973–74 (10.28).

Varieties of wheat sown

The breeding of wheat suitable to local conditions has long been established in Australia. Farrer (1845–1905) did invaluable work in pioneering this field, and the results of his labour and the continued efforts of those who have followed him have proved of immense benefit to the industry. Their efforts have resulted in the development of disease-resistant varieties, better average yields, and a greater uniformity of sample, with which have accrued certain marketing advantages as well as an improvement in the quality of wheat grown. In 1968 the Australian Wheat Collection was established at Tamworth, New South Wales, to supply basic genetic material to Australian wheat breeders. Some 15,000 varieties are at present held in the collection.

The principal varieties of wheat sown and the percentage of each to the total area sown in the five main wheat-producing States of Australia in 1974–75 were as follows: New South Wales, Eagle (16.9), Timgalen (16.5), Olympic (11.6); Victoria, Halberd (45.2), Olympic (26.3), Summit (10.6); Queensland, Gatcher (31.8), Gamut (20.6), Timgalen (15.2); South Australia, Halberd (62.0), Gabo (5.4), Heron (4.8); and Western Australia, Gamenya (63.1), Falcon (11.3), Insignia (4.8). A detailed table of wheat varieties sown appears in the annual bulletin *The Wheat Industry*, (*Preliminary*) (10.35).

Wheat area and production

Prominent factors in the early development of the wheat industry were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress, but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphate as an aid to production, and the introduction of new and more suitable varieties of wheat for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion.

WHEAT FOR GRAIN: AREA AND PRODUCTION

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
				AREA ('000 HECTARES)				
1971–72	2,426	1,040	556	1,069	2,042	5	..	7,138
1972–73	2,618	1,087	471	986	2,437	4	..	7,604
1973–74	2,883	1,258	395	1,432	2,978	3	..	8,948
1974–75	2,646	1,141	489	1,220	2,810	2	..	8,308
1975–76p	2,774	1,073	576	958	3,166	3	..	8,550
				PRODUCTION ('000 TONNES)				
1971–72	2,410	1,894	722	1,407	2,165	8	1	8,606
1972–73	1,954	1,405	405	815	2,003	8	..	6,590
1973–74	3,962	1,490	526	1,795	4,211	4	..	11,987
1974–75	3,809	2,091	692	1,486	3,277	2	..	11,357
1975–76p	4,310	1,580	830	1,139	3,963	2	..	11,824

A graph showing the area sown to wheat for grain in Australia for the years 1900–01 to 1970–71 appears in Year Book No. 58, Plate 39, page 746, and a map showing the distribution of areas growing wheat for grain throughout Australia in 1962–63 appears on page 1013 of Year Book No. 50. Similar maps showing the distribution of wheat areas in 1924–25, 1938–39, 1947–48, and 1954–55 appeared respectively in Year Books No. 22, page 695, No. 34, page 451, No. 39, pages 977–8, and No. 43, page 833.

The size of the wheat harvest in Australia is determined largely by the nature of the season, resulting in considerable year-to-year fluctuations in production. The main wheat-producing States of Australia are New South Wales, Western Australia and Victoria. Tasmania imports wheat from the mainland to satisfy its needs, though it exports flour made from local wheat which is particularly suitable for biscuits. The production of wheat from 1940–41 is shown in Plate 47, below.

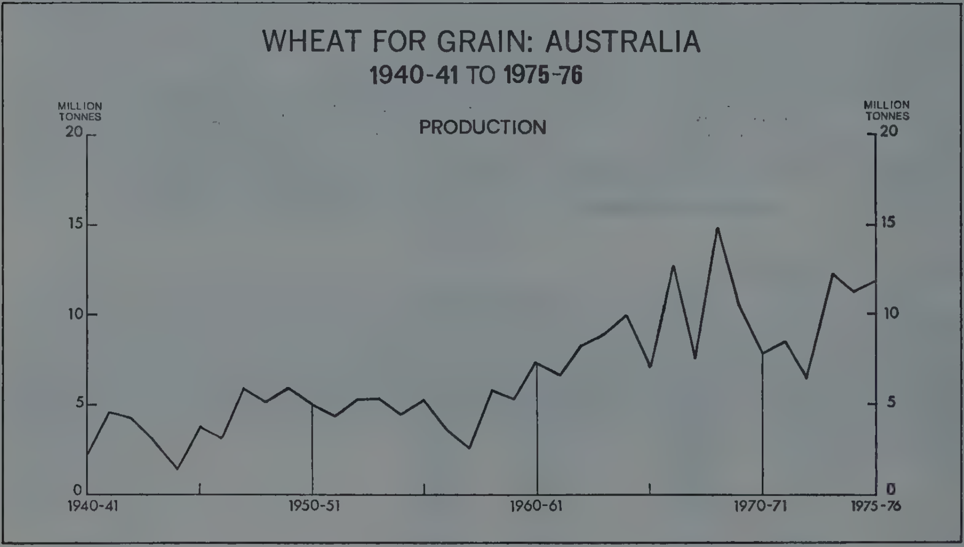


PLATE 47

Price of wheat

The Wheat Board's monthly basic export selling prices for A.S.W. bulk wheat, f.o.b. basis, are shown below.

MONTHLY EXPORT WHEAT PRICES(*a*)

($ per tonne)

Month	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
July	46.99	52.50	49.05	92.46	118.45
August	47.40	51.53	51.17	131.91	117.73
September	49.19	49.88	61.18	138.98	120.10
October	50.94	48.92	71.51	134.67	150.56
November	51.99	48.55	73.99	134.67	156.00
December	52.27	48.13	83.09	134.94	149.35
January	53.19	47.95	82.44	141.92	131.08
February	52.87	47.95	72.71	148.31	116.41
March	52.87	47.95	70.18	150.74	107.80
April	52.68	48.73	70.23	149.27	103.48
May	52.50	48.96	73.90	123.78	95.52
June	52.31	48.69	83.13	110.23	92.83

(*a*) Australian Wheat Board average basis f.o.b. price quoted for A.S.W. bulk wheat. Much of the wheat exported is sold under contract for delivery over lengthy periods, and therefore, the prices shown do not necessarily reflect the prices received for all wheat shipped during the months shown.

Production and disposal of wheat in Australia

In the following tables details are given of Australian Wheat Board transactions, production and disposal of wheat during each of the years ended 30 November 1971 to 1974, and preliminary estimates for 1974–75.

RECEIVALS OF WHEAT BY THE AUSTRALIAN WHEAT BOARD

('000 tonnes)

State of origin	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
	Pool	*Pool*	*Pool*	*Pool*	*Pool*
New South Wales	2,646	2,097	1,508	3,683	3,625
Victoria	803	1,665	1,116	1,379	1,985
Queensland	90	666	325	474	658
South Australia	681	1,306	711	1,672	1,377
Western Australia	2,712	1,927	1,775	3,989	3,059
Tasmania	3	5	4	2	1
Total	**6,936**	**7,666**	**5,440**	**11,199**	**10,704**

Stocks of wheat (including flour in terms of wheat) held by the Australian Wheat Board are shown in the following table. These data relate to stocks held at mills, sidings, ports, and depots as recorded by the Australian Wheat Board.

STOCKS OF WHEAT, AND FLOUR AS WHEAT

(*Source:* Australian Wheat Board)

('000 tonnes)

	30 November				
State	*1971*	*1972*	*1973*	*1974*	*1975*
New South Wales	1,504.7	489.2	175.5	775.9	621.1
Victoria	655.1	399.3	130.3	340.2	486.6
Queensland	2.5	25.7	19.7	22.3	18.3
South Australia	430.0	278.9	42.7	125.7	168.5
Western Australia	798.6	244.7	95.9	612.5	354.8
Tasmania	13.4	12.9	13.7	5.4	8.0
Total	**3,404.3**	**1,450.7**	**477.7**	**1,881.9**	**1,657.5**

Particulars of the production and disposal of wheat during the years ended 30 November 1971 to 1975 are shown in the following table.

PRODUCTION, DISPOSAL AND STOCKS OF WHEAT: AUSTRALIA

('000 tonnes)

	Year ended 30 November				
	1971	*1972*	*1973*	*1974*	*1975*
Opening stocks (including flour as wheat)(*a*)(*b*)	7,222	3,404	1,451	478	1,882
Production	7,890	8,606	6,590	11,987	11,357
Total available supplies	**15,112**	**12,010**	**8,041**	**12,465**	**13,239**
Exports—					
Wheat(*b*)	8,595	7,426	3,855	7,124	8,254
Flour and wheat products(*b*),(*c*)	454	334	282	294	296
Local consumption—					
Flour(*b*)(*c*)	1,246	1,275	1,272	1,362	1,334
Breakfast foods and other products(*b*)(*c*)	39	38	36	46	55
Stock feed wheat sales(*b*)	395	534	935	911	1,007
Seed	444	544	602	506	529
Balance (including retained on farm for other than seed use)	510	396	548	282	124
Closing stocks (including flour as wheat)(*a*)(*b*)	3,404	1,451	478	1,882	1,658
Total disposals	**15,087**	**11,988**	**8,008**	**12,407**	**13,257**
Excess (+) or deficiency (−) of disposals in relation to total available supplies(*d*)	−25	−12	−33	−58	+18

(*a*) Held at ports, depots, mills and sidings. (*b*) *Source:* Australian Wheat Board. (*c*) In terms of wheat. (*d*) Includes allowances for unrecorded movements in stocks, gain or loss in out-turn, etc., and in differences related to the timing of official export statistics.

AUSTRALIAN WHEAT BOARD: FINANCIAL OPERATIONS

($'000)

	70/71 Pool	*71/72 Pool*	*72/73 Pool*	*73/74(a) Pool*	*74/75(a) Pool*
Paid to growers	310,798	317,047	262,728	1,087,399	1,027,887
Rail freight	50,994	47,636	36,498	77,300	85,000
Expenses	37,406	32,974	39,521	19,375	43,448
Wheat Industry Research Fund	713	689	555	1,232	1,175
Stabilisation Fund(a)	. .	. .	. .	48,599	30,000
Total payments	**399,911**	**398,346**	**339,302**	**1,233,905**	**1,187,510**
Value of sales delivered	367,853	358,214	326,942	1,233,905	1,187,510

(a) Prior to the 1973–74 pool, the Commonwealth Government made payments into the fund of $32,058,000, $40,132,000 and $12,360,000 for the 1970–71, 1971–72 and 1972–73 Pools respectively. Payments since, have been made by the Wheat Board.

Details of earlier pools will be found in previous issues of the Year Book.

Imports of wheat

Wheat and flour have been imported in substantial quantities on four occasions since 1900; in 1902–3 the wheat harvest was only 336,874 tonnes, and wheat and flour equivalent to 339,323 tonnes of wheat were imported. An equivalent of 198,102 tonnes was imported in 1914–15 to supplement the yield of 680,000 tonnes produced in that season. Drought conditions in the Eastern States in 1945 necessitated the importation of feed grains from the U.S.A. including 20,000 tonnes of wheat. Owing to drought conditions in 1957–58 supplies of high protein wheat were insufficient for local requirements and, as a result, 40,415 tonnes were imported from Canada in 1958. No significant imports of wheat have since been recorded.

Exports of wheat and flour

Statistics in the following three tables are for years ended 30 June and relate to the exports of *Australian produce* only.

WHEAT AND FLOUR: EXPORTS, AUSTRALIA

($'000 f.o.b.)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Wheat(a)	433,000	418,529	273,096	517,114	1,034,396
Flour(b)	21,374	15,091	14,579	23,082	51,479
Total	**454,374**	**433,620**	**287,675**	**540,196**	**1,085,875**

(a) Includes both bulk and bagged. (b) White flour (plain and self-raising), sharps and wheatmeal for baking.

WHEAT: EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA

('000 tonnes)

Country to which exported	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Arab Republic of Egypt	1,275	1,801	777	715	861
Bangladesh	..	14	53	242	310
China (excluding Taiwan province)	1,310	..	324	1,163	1,423
India	116	55	..	666	236
Indonesia	..	105	72	115	598
Iran	295	397	..	..	424
Iraq	437	192	..	116	255
Japan	821	1,466	752	424	1,009
Malaysia	312	310	300	315	285
Pakistan, Islamic Republic of	159	30	19	23	539
Singapore	277	134	175	167	167
U.S.S.R.	..	502	908	18	635
Other(*a*)	4,086	3,454	2,013	1,165	1,184
Total	**9,089**	**8,460**	**5,391**	**5,128**	**7,926**

(*a*) Includes particulars of shipments made 'for orders' which could not be classified to country of consignment at the time of export.

The following table shows the exports of flour to various countries in recent years. The figures relate to exports of white flour (plain and self-raising), sharps and wheatmeal for baking.

FLOUR(*a*): EXPORTS TO VARIOUS COUNTRIES, AUSTRALIA

(tonnes)

Country to which exported	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Fiji	33,631	33,948	31,606	16,263	6,734
Gilbert and Ellice Islands	1,611	1,737	1,876	2,044	2,482
Mauritius	13,542	17,295	17,517	17,162	16,024
Oman	4,727	6,204	5,169	6,600	6,620
Papua New Guinea	21,408	19,521	19,567	18,526	21,486
Philippines	1,597	786	8,179	8,154	5,467
Samoa (Western)	2,333	2,502	2,519	3,144	3,821
Saudi Arabia	10,570	9,530	10,017	11,029	7,956
Somali, Democratic Republic of	..	..	..	..	5,156
Sri Lanka	85,020	14,911	13,524	21,715	117,346
Tonga	2,979	3,402	4,089	3,227	3,401
United Arab Emirates	18,072	17,951	23,176	26,190	31,642
Other(*b*)	105,377	68,721	47,376	13,750	11,646
Total	**300,867**	**196,508**	**184,615**	**147,804**	**239,781**

(*a*) Plain white and self-raising flour, sharps and wheatmeal for baking. (*b*) Includes particulars of shipments made 'for orders' which could not be classified to country of consignment at the time of export.

World area and production of wheat

The figures in the following table of the world area and production of wheat by principal countries and by continents have been compiled from statistics published by the International Wheat Council. Harvests in the northern hemisphere occur in the first of the two years mentioned in each column heading, and in the southern hemisphere at the end of that year and the beginning of the next. Harvests of the northern hemisphere countries are thus combined with those of the southern hemisphere which immediately follow; e.g. in 1974–75 the Canadian harvest occurred from August to September 1974 and the Australian harvest from October 1974 to February 1975.

WHEAT: AREA, PRODUCTION, AND YIELD PER HECTARE IN VARIOUS COUNTRIES AND REGIONS(*a*)

(*Source for countries other than Australia:* International Wheat Council—*Review of the World Wheat Situation*)

Country and region	*Area*			*Production*			*Yield per hectare*		
	1973–74	*1974–75*	*1975–76p*	*1973–74*	*1974–75*	*1975–76p*	*1973–74*	*1974–75*	*1975–76p*
	'000 hectares	'000 hectares	'000 hectares	'000 tonnes	'000 tonnes	'000 tonnes	tonnes	tonnes	tonnes
Africa	9,570	9,017	n.a.	8,730	8,480	(*b*)8,475	0.912	0.940	n.a.
Asia—									
China—excl. Taiwan Province(*c*)	25,000	26,000	n.a.	27,000	31,200	32,000	1.080	1.200	n.a.
India	19,484	19,057	n.a.	24,735	22,073	26,000	1.270	1.158	n.a.
Pakistan	5,971	6,112	5,888	7,443	7,629	7,299	1.247	1.248	1.240
Turkey(*d*)	8,850	8,750	9,035	10,000	11,000	14,750	1.130	1.257	1.633
Total Asia(a)	*72,620*	*72,816*	*n.a.*	*79,200*	*82,759*	*92,450*	*1.091*	*1.137*	*n.a.*
Europe—									
European Economic Community	*10,832*	*11,223*	*10,476*	*41,443*	*45,346*	*38,072*	*3.826*	*4.040*	*3.634*
France	3,960	4,139	3,867	17,882	19,106	15,100	4.516	4.616	3.905
Germany, Federal Republic of(*d*)	1,603	1,631	1,571	7,134	7,761	6,976	4.450	4.758	4.440
Italy	3,590	3,712	3,553	8,920	9,695	9,600	2.485	2.612	2.702
Total Europe(a)	*26,536*	*27,335*	*n.a.*	*82,165*	*90,678*	*78,535*	*3.096*	*3.317*	*n.a.*
Canada	9,430	9,501	10,300	16,460	13,300	16,500	1.745	1.400	1.602
United States	21,923	26,427	27,900	46,407	48,807	58,200	2.117	1.847	2.086
Total North and Central America(a)	*32,033*	*36,736*	*39,040*	*64,930*	*64,880*	*(d)77,550*	*2.027*	*1.766*	*1.986*
Oceania—									
Australia	8,948	8,308	8,555	11,987	11,357	11,824	1.340	1.367	1.383
Total Oceania(a)	*9,021*	*8,367*	*n.a.*	*12,236*	*11,547*	*11,934*	*1.355*	*1.306*	*n.a.*
South America—									
Argentina	3,958	3,900	4,600	6,560	5,400	8,000	1.657	1.385	1.739
Total South America(a)	*6,500*	*7,400*	*n.a.*	*9,978*	*9,829*	*12,412*	*1.535*	*1.328*	(*b*)
U.S.S.R. (Europe and Asia)	63,200	59,700	61,000	109,700	83,800	70,000	1.736	1.404	1.148
World total(*a*)	**219,480**	**221,371**	**n.a.**	**366,939**	**351,973**	**351,356**	**1.672**	**1.590**	**n.a.**

(*a*) Totals include estimates for countries not listed. (*b*) International Wheat Council estimate. (*c*) United States Department of Agriculture estimate. (*d*) Includes spelt.

Principal wheat exporting and importing countries

The following table shows world exports of wheat and wheat flour (in terms of wheat) by the major wheat exporting countries, according to continents and countries of primary destination, based on statistics recently published by the International Wheat Council. While Australia's production of wheat has averaged about three per cent of the world's total during recent years, its exports account for a much higher proportion of the total quantities shipped. For the three years ended 1975–76 Australia's share of the world wheat exports has averaged 14 per cent.

WORLD EXPORTS OF WHEAT, AND WHEAT FLOUR IN TERMS OF WHEAT 1970-71 TO 1974-75

(*Source:* International Wheat Council—*Review of the World Wheat Situation*)

('000 tonnes)

Year and country o primary destination	*Exporting country*							
	Argentina	*Australia*	*Canada*	*E.E.C.*	*U.S.A.*	*U.S.S.R.*	*Other*	*Total*
1974–75*p*—								
Algeria	103	..	613	363	717	..	128	1,924
Arab Republic of Egypt	15	848	..	1,601	750	..	180	3,394
Bangladesh	18	299	332	631	790	..	50	2,120
Brazil	84	..	987	..	596	..	..	1,667
Chile	50	97	..	..	516	..	..	663
China—excl. Taiwan Province	210	1,244	2,366	180	1,496	..	..	5,496
Cuba	..	..	748	..	..	200	..	948
Czechoslovakia	..	..	..	1	..	600	75	676
E.E.C. (incl. U.K.)	217	..	2,555	..	2,158	..	322	5,252
German Democratic Republic	..	..	..	..	..	1,300	255	1,555
India	260	261	506	823	4,300	..	150	6,300
Indonesia	..	598	78	55	98	..	..	829
Iran	..	424	..	57	1,735	..	1	2,217
Japan	33	963	1,187	..	3,079	..	..	5,262
Korea, Republic of	..	..	..	..	1,733	..	..	1,733
Lebanon	16	88	180	55	95	..	200	634
Mexico	..	..	..	..	832	..	..	832
Morocco	90	..	17	373	456	..	51	987
Pakistan, Islamic Republic of	..	539	29	277	885	..	19	1,749
Peru	..	120	117	19	628	..	..	884
Philippines	..	18	159	15	323	..	..	515
Poland	..	..	74	..	52	1,000	161	1,287
Saudi Arabia	..	67	15	157	287	..	..	526
Sri Lanka	..	222	2	310	109	..	18	661
Turkey	..	..	..	285	675	..	50	1,010
U.S.S.R.	680	656	313	..	978	..	201	2,828
Venezuela	..	..	52	..	655	..	..	707
Vietnam	..	..	..	..	..	600	6	606
Other countries	402	1,605	838	1,991	4,382	300	649	10,167
Total 1974–75	**2,178**	**8,049**	**11,168**	**7,193**	**28,325**	**4,000**	**2,516**	**63,429**
1970–71	1,704	9,492	11,561	3,165	19,821	7,072	1,459	54,274
1971–72	1,328	8,736	13,761	4,656	16,907	5,478	1,668	52,534
1972–73	3,510	5,562	15,648	6,525	31,992	1,303	3,738	68,278
1973–74	1,106	5,509	11,737	5,467	31,068	5,035	3,149	63,071

The above particulars are based on customs clearances of the exporting countries, and relate to years ended 30 June. There are small differences between Australian exports as shown and those on pages 759–60 due in part to the use by the International Wheat Council of a slightly different factor to convert flour to wheat equivalent.

Oats

Oats is traditionally a cereal of moist temperate regions. However improved varieties and management practices have enabled oats to be grown over a wide range of soil and climatic conditions. It has excellent feed value and produces a greater bulk of growth than other winter cereals. It needs less cultivation than other winter cereals and responds to superphosphate and nitrogen in districts where it is usual to apply fertilisers. Oats has a variety of uses—as a pasture plant when rough sown into stubble or heavy clover pastures, as a fodder crop when mown and baled or cut for chaff, or as a grain when stripped (the stubble then being grazed off). The grain is sold through voluntary pools in Victoria, South Australia and Western Australia. In 1971 State statutory marketing boards were set up in New South Wales and Victoria after a poll of growers. The Victorian board was disbanded in 1972 and marketing reverted to a voluntary pooling arrangement. In Western Australia the grain is sold through a voluntary pool and in South Australia through private trading organisations.

Oats area, production and yield per hectare

Oats is usually next in importance to wheat and barley among the grain crops cultivated in Australia. However, while wheat grown for grain in 1974–75 accounted for 60 per cent of the area of all crops, oats grown for grain represented only 6 per cent.

OATS FOR GRAIN: AREA, PRODUCTION AND YIELD PER HECTARE

	N.S.W.	*Vic.*	*Qld*	*S.A*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
				AREA ('000 HECTARES)				
1971–72	261	329	21	169	454	6	..	1,241
1972–73	285	255	10	142	297	6	..	995
1973–74	405	271	20	152	325	9	..	1,182
1974–75	270	198	25	135	262	6	..	897
1975–76p	289	243	12	119	320	4	..	987
				PRODUCTION ('000 TONNES)				
1971–72	221	449	18	166	414	7	..	1,275
1972–73	196	238	8	74	212	7	..	736
1973–74	327	233	13	142	383	8	..	1,107
1974–75	293	186	28	112	250	5	..	874
1975–76p	350	282	13	107	385	4	..	1,141
				YIELD PER HECTARE (TONNES)				
1971–72	0.847	1.364	0.857	0.982	0.912	1.097	0.851	1.028
1972–73	0.689	0.936	0.789	0.525	0.715	1.103	0.516	0.740
1973–74	0.808	0.858	0.677	0.935	1.179	0.899	1.181	0.937
1974–75	1.086	0.940	1.120	0.828	0.951	0.906	1.185	0.975
1975–76p	1.211	1.160	1.083	0.899	1.203	1.000	1.133	1.156

A map showing the distribution of areas growing oats for grain throughout Australia in 1962–63 appears on page 1015 of Year Book No. 50. The area sown to oats from 1900–01 to 1970–71 is shown in Year Book No. 58, Plate 39, page 746. The production of oats from 1945–46 to 1975–76 is shown in plate 48, page 763.

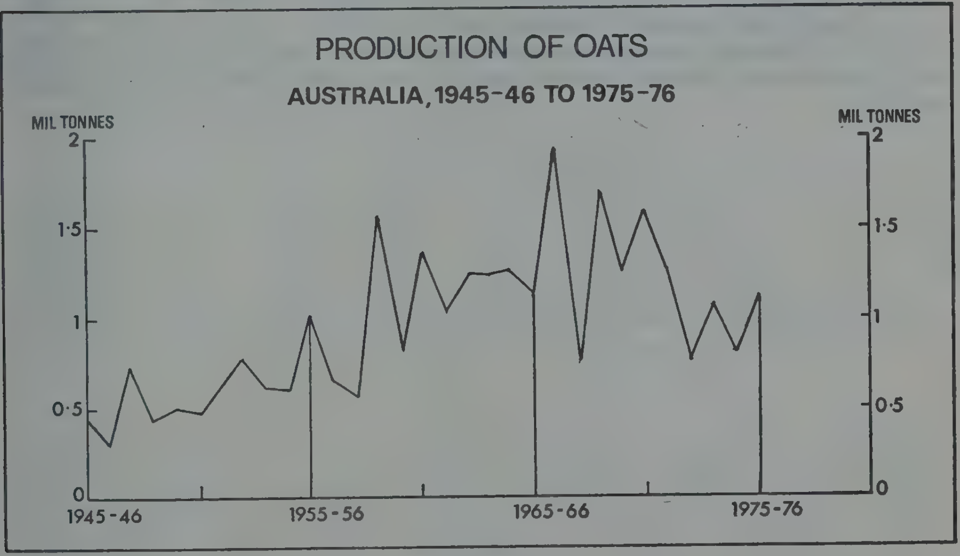


PLATE 48

Exports of Oats

OATS: EXPORTS, AUSTRALIA

		1970–71	1971–72	1972–73	1973–74	1974–75
Quantity . . .	tonne	555,917	328,979	114,534	180,655	267,271
Value . . .	$'000 f.o.b.	23,827	12,425	5,016	13,582	19,768

In 1974–75 the principal countries of destination were Japan (157,811 tonnes), Germany, F.R. (59,527 tonnes), Malaysia (5,149 tonnes) and the United Kingdom (2,859 tonnes).

World production of oats

The world production of oats for the 1974–75 season, according to estimates by the Bureau of Agricultural Economics, Canberra, amounted to 51 million tonnes. This represents a 5 per cent decrease in production over the previous year. The main producers are the Union of Soviet Socialist Republics, the United States, Canada, Germany F. R., and Poland, with Australia producing about 1.7 per cent of the world total. Australia is one of the world's largest exporters of oats.

Barley

This cereal contains two main groups of varieties, 2-row and 6-row. The former is generally, but not exclusively, preferred for malting purposes. Barley is grown principally on pasture land worked up early in the year of sowing. In this way it forms an important phase in the rotation of crops. Like oats, it may also be sown for fodder production or for grain. When sown for fodder, sowing may take place either early or late in the season, as it has a short growing period. It may thus provide grazing or fodder supplies when other sources are not available. Barley grain may be crushed to meal for stock or sold for malting.

Crops sown for malting purposes require a combination of light textured soil of moderate fertility, reliable rainfall, and mild weather during ripening. The main barley-growing areas in Australia are situated in South Australia (South Adelaide Plains, Eyre and Yorke Peninsulas), but considerable quantities are grown also in New South Wales, Victoria, Queensland and Western Australia. There are State statutory marketing boards operating in New South Wales, Victoria, Queensland and South Australia. The Western Australian Barley Marketing Board was abolished at the end of 1975 and the marketing of barley in Western Australia is now the responsibility of the Grain Pool of Western Australia.

Barley Boards

The bulk of the barley crop is acquired and marketed by grower-controlled boards. (In Western Australia these functions are carried out by the Grain Pool of Western Australia.) Pooled returns from sales are distributed to growers at standard rates for the individual grades and varieties delivered. The Victorian and South Australian crops are marketed by the Australian Barley Board (a joint board established by the two State Governments), and the Queensland and New South Wales Boards and the Grain Pool of Western Australia handle the crops of their respective States. Particulars of the proportion of barley production which was received by the Australian Barley Board (for Victoria and South Australia), together with details of quantity sold, advances and total payments to growers are presented below.

AUSTRALIAN BARLEY BOARD: BARLEY RECEIVED, SOLD, ETC. 1970–71 TO 1974–75

Pool	*Quantity received*	*Quantity sold*	*Total advances per tonne(a)*	*Net payments to growers*
	tonnes	tonnes	$	$'000
No. 32 (1970–71 Crop)	827,829	826,083	48.54	34,551
,, 33 (1971–72 ,,)	1,135,065	1,132,104	42.49	38,302
,, 34 (1972–73 ,,)	441,949	442,001	56.01	21,949
,, 35 (1973–74 ,,)	911,481	910,293	82.15	70,128
,, 36 (1974–75p ,,)	1,350,645	1,346,255		117,533

(*a*) 2-row No. 1 Grade (bulk) less freight.

Barley area, production and yield per hectare

The production of barley for grain in 1974–75, 2,513,000 tonnes, was 18 per cent less than the previous record production of 3,065,000 tonnes in 1971–72. The area, production and yield per hectare of barley for grain in the States for the years 1971–72 to 1975–76 are shown in the following table.

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER HECTARE

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
AREA ('000 HECTARES)								
1971–72	373	296	159	784	911	13	..	2,535
1972–73	336	277	78	692	744	13	..	2,140
1973–74	386	222	139	627	510	11	..	1,894
1974–75	327	243	156	701	387	12	..	1,826
1975–76p	486	344	236	832	419	12	..	2,329

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER HECTARE—*continued*

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.*
				PRODUCTION ('000 TONNES)				
1971–72	346	395	249	1,047	1,000	28	..	3,065
1972–73	266	214	80	509	640	19	..	1,727
1973–74	448	285	221	793	626	24	..	2,397
1974–75	408	319	297	1,134	329	28	..	2,515
1975–76p	697	445	419	1,094	507	18	..	3,180
				YIELD PER HECTARE (TONNES)				
1971–72	0.927	1.336	1.568	1.336	1.098	2.202	..	1.209
1972–73	0.792	0.771	1.026	0.735	0.861	1.462	..	0.807
1973–74	1.162	1.287	1.592	1.264	1.228	2.139	..	1.265
1974–75	1.248	1.314	1.902	1.619	0.850	2.333	..	1.382
1975–76p	1.434	1.294	1.775	1.315	1.210	1.500	..	1.365

The production of barley in Australia since 1945–46 is shown in plate 49, and a map showing the distribution of barley growing areas throughout Australia in 1962–63 appears on page 1014 of Year Book No. 50. The area sown to barley from 1900–01 to 1970–71 is shown in Year Book No. 58, plate 39, page 746.

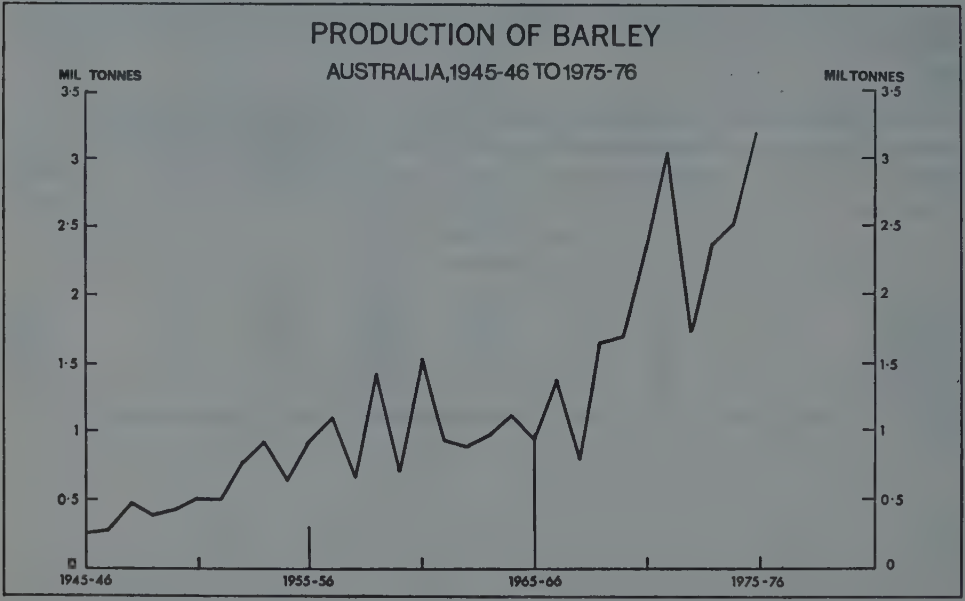


PLATE 49

Exports of barley

South Australia is the principal exporting State, and the Republic of Korea, Taiwan Province and Japan were the principal countries to which barley was shipped in 1974–75. Particulars of exports of Australian-produced barley for the years 1970–71 to 1974–75 are shown in the following table.

BARLEY: EXPORTS, AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Quantity	tonne	1,122,970	1,816,765	804,122	508,467	1,759,700
Value	$'000 f.o.b.	50,820	74,344	38,512	68,463	186,682

In addition to exports of barley grain, there are also exports of Australian pearl and Scotch barley, the total for 1974–75 amounting to 917,285 kgs, valued at $195,146, the main country of consignment being Peru.

Barley malt

Since 1952–53 the production of malt in Australia has been sufficient to meet local requirements and to provide a margin for export. Exports of Australian produce amounting to 149,373 tonnes (value $20,706,000) and 213,645 tonnes (value $35,711,000) were recorded in 1973–74 and 1974–75 respectively.

World production of barley

In comparison with the barley production of other countries that of Australia is extremely small. The main producers in 1974 were the Union of Soviet Socialist Republics, China (excluding Taiwan Province), France, United Kingdom, Canada, the Federal Republic of Germany and the United States of America. Australian production in 1974–75 was approximately 2 per cent of the world total.

According to preliminary estimates made by the Bureau of Agricultural Economics, Canberra, world production of barley in the year 1974 amounted to 171 million tonnes. This compared with the production of 169 million tonnes in the previous year.

Sorghum

The sorghums are summer growing crops which are used in three ways: grain sorghum for grain; sweet or fodder sorghum, sudan grass and more recently columbus grass for silage, green feed and grazing; and broom millet for brooms and brushware.

The growing of grain sorghum on an extensive scale did not attain a position of prominence until the last two decades. Operations are highly mechanised and rapid increases in production have resulted in a substantial increase in exports. The grain is used primarily as stockfeed and is an important source for supplementing other coarse grains for this purpose.

The climatic conditions of Queensland and northern New South Wales are particularly suited to the growing of sorghums. In Queensland grain sorghum production is concentrated in the Burnett, Dawson-Callide areas and in the Central Highlands. In New South Wales the north-western slopes and plains are the main areas.

In Central Queensland orderly marketing of the crop is arranged through the Central Queensland Grain Sorghum Marketing Board and in Southern Queensland the Grain Sorghum Export Committee of the Queensland Grain-growers Association. A State statutory marketing board commenced operations in New South Wales with the marketing of the 1972 crop.

GRAIN SORGHUM: AREA, PRODUCTION AND YIELD PER HECTARE

	Area			*Production*			*Yield per hectare*		
Year	*N.S.W.*	*Qld*	*Aust.(a)*	*N.S.W.*	*Qld*	*Aust.(a)*	*N.S.W.*	*Qld*	*Aust.(a)*
	hectares	hectares	hectares	'000 tonnes	'000 tonnes	'000 tonnes	tonnes	tonnes	tonnes
1970–71 .	180,365	368,717	552,184	487	806	1,297	2.697	2.186	2.350
1971–72 .	207,793	423,234	638,392	371	833	1,228	1.786	1.969	1.924
1972–73 .	269,002	414,133	697,162	372	622	1,018	1.382	1.502	1.460
1973–74 .	201,469	331,656	539,671	394	654	1,061	1.954	1.973	1.965
1974–75 .	176,209	328,886	511,089	257	634	901	1.457	1.928	1.762

(*a*) Includes small areas sown and quantities produced in other States and Territories.

Maize

Like sorghum, maize is a summer cereal demanding specific soil and climatic conditions. For grain, growing is almost entirely confined to the south-east regions and Atherton Tablelands of Queensland and the north coast and northern tablelands of New South Wales. On the Atherton Tablelands in Queensland, and generally in New South Wales and Victoria, the cereal provides a stock feed for dairy cattle, fat stock, poultry and pigs. In times of drought it is used also as a sheep feed. In all States except South Australia, however, this crop is grown to some extent for green feed and silage, particularly in connection with the dairying industry. There is practically no difference between grain and fodder varieties.

There has been a continuing increase in recent years in the growing of maize from hybrid strains of seed. Varieties have been developed which are capable of producing yields per hectare considerably in excess of the older open pollinated types. The expansion in areas sown to hybrid maize has led to a parallel development in the specialised industry of growing hybrid strains for seed.

A State statutory board controls marketing in the Atherton Tablelands area of Queensland. Marketing of maize in New South Wales has in the past been conducted by private merchants. A poll of growers in 1975 voted for the formation of a marketing board in that State and the Board is expected to commence operation with the 1977 crop.

Production of maize in Australia is small, totalling only 133,000 tonnes in 1974–75. This produce is mostly consumed domestically with a small proportion going to the export market.

Maize area, production and yield per hectare

MAIZE FOR GRAIN: AREA, PRODUCTION AND YIELD PER HECTARE

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
AREA (HECTARES)									
1970–71 . . .	33,313	535	51,725	..	62	..	..	..	85,635
1971–72 . . .	33,243	375	44,546	..	29	..	..	..	78,193
1972–73 . . .	23,850	496	34,913	..	(*a*)	..	(*a*)	..	(*b*)59,259
1973–74 . . .	17,950	654	27,002	(*a*)	(*a*)	..	..	..	(*b*)45,606
1974–75 . . .	22,177	543	28,675	(*a*)	(*a*)	..	..	..	(*b*)51,395
PRODUCTION ('000 TONNES)									
1970–71 . . .	106	2	104	..	..	..	..	..	212
1971–72 . . .	114	2	97	..	..	..	..	..	214
1972–73 . . .	67	2	70	..	(*a*)	..	(*a*)	..	(*b*)139
1973–74 . . .	48	2	56	(*a*)	(*a*)	..	..	..	(*b*)106
1974–75 . . .	60	2	72	(*a*)	(*a*)	..	..	..	(*b*)133
YIELD PER HECTARE (TONNES)									
1970–71 . . .	3.195	2.950	2.002	..	0.645	..	..	..	2.471
1971–72 . . .	3.443	5.117	2.188	..	3.828	..	..	..	2.736
1972–73 . . .	2.822	3.036	2.005	..	(*a*)	..	(*a*)	..	2.343
1973–74 . . .	2.669	2.890	2.074	(*a*)	(*a*)	..	..	..	(*b*)2.320
1974–75 . . .	2.689	3.536	2.503	(*a*)	(*a*)	..	..	..	(*b*)2.594

(*a*) Not available for publication. (*b*) Incomplete; *see* footnotes to individual States.

Exports of maize

MAIZE: EXPORTS, AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Quantity	tonne	22,375	38,469	9,191	2,693	1,272
Value	$'000 f.o.b.	1,203	2,283	493	230	155

World production of maize

According to figures issued by the Bureau of Agricultural Economics, Canberra, world production of maize in the year 1974–75 season amounted to 282 million tonnes. This compared with production in the previous year of 312 million tonnes.

The United States of America is the most important maize-producing country in the world, and accounted for 41 per cent (118 million tonnes) of total world production in 1974–75.

Rice

The principal rice-growing areas of the world are confined almost entirely to Asia, although limited quantities are grown in other countries. In Australia rice was first cultivated at the Yanco Experimental Farm in New South Wales, but it was not grown commercially until 1924–25. Favoured by high average yields, rice culture made rapid progress in the Murrumbidgee Irrigation Areas until local requirements were met and a surplus became available for export. The area sown in the Murrumbidgee Irrigation Areas is controlled, as the quantity of water available is limited.

Apart from small experimental areas in Western Australia and the Northern Territory, rice-growing in Australia is practically confined to the Murray and Murrumbidgee Irrigation Areas in New South Wales and the Burdekin area of Queensland. In 1974–75, the largest purchasers of Australian rice were Papua New Guinea, the Pacific Islands, Indonesia and Hong Kong. Details relating to area, production, and Australian-produced exports for recent years are shown in the following table.

RICE: AREA, PRODUCTION AND EXPORTS, AUSTRALIA(*a*)

Year	*Area*	*Production (paddy rice)*	*Average yield (paddy) per hectare*	*Imports*	*Exports*
		Quantity			
	hectares	'000 tonnes	tonnes	tonnes	tonnes
1970–71	40,721	300	7.363	438	102,428
1971–72	40,403	248	6.134	384	108,555
1972–73	45,150	309	6.835	414	157,611
1973–74	67,502	409	6.056	371	136,520
1974–75	75,562	388	5.141	527	174,332

(*a*) For some years particulars of area and production for Western Australia and the Northern Territory are not available for publication, and are excluded.

Fodder crops

Hay

As well as crops grown specifically for grain, considerable areas of Australia are devoted to fodder crops. These crops are utilised either for grazing (as green feed), or conserved as hay, ensilage, etc.

This development of fodder conservation as a means of supplementing pasture and natural sources of stockfeed is the result of the comparatively unreliable nature of rainfall in Australian agricultural and pastoral areas.

HAY: AREA, PRODUCTION AND YIELD PER HECTARE

Season	N.S.W.	Vic.	Qld	S.A	W.A.	Tas.	N.T.	A.C.T.	Aust.
AREA ('000 HECTARES)									
1970–71	47	80	16	84	116	4	1	..	349
1971–72	65	88	13	78	95	2	..	..	341
1972–73	74	139	13	89	133	4	..	..	453
1973–74	49	70	10	80	113	3	..	..	325
1974–75	37	46	8	51	73	2	..	..	216
PRODUCTION ('000 TONNES)									
1970–71	185	355	26	284	401	21	..	1	1,274
1971–72	193	363	48	296	332	13	..	..	1,247
1972–73	175	442	34	203	351	17	1	..	1,224
1973–74	131	234	23	263	367	13	2	..	1,034
1974–75	98	159	22	168	214	8	..	..	669
YIELD PER HECTARE (TONNES)									
1970–71	3.935	4.442	1.597	3.367	3.456	5.016	0.600	3.931	3.650
1971–72	2.978	4.108	3.833	3.813	3.507	5.240	2.727	1.753	3.655
1972–73	2.368	3.169	2.644	2.277	2.646	3.923	2.735	1.474	2.701
1973–74	2.817	3.359	2.483	3.270	3.279	4.311	6.510	5.227	3.218
1974–75	2.667	3.455	2.844	3.303	2.935	4.307	2.400	2.875	3.096

HAY: AREA OF VARIOUS TYPES GROWN 1974–75

(Hectares)

State or Territory	Oats	Wheat	Other	Total
New South Wales	19,305	15,338	2,004	36,647
Victoria	38,250	5,440	2,425	46,115
Queensland	3,353	1,005	3,340	7,698
South Australia	34,951	9,832	6,034	50,817
Western Australia	52,880	15,477	4,413	72,770
Tasmania	1,381	94	451	1,926
Northern Territory	..	..	34	34
Australian Capital Territory	8	..	..	8
Australia	**150,128**	**47,186**	**18,701**	**216,015**

Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for overseas trade, and consequently does not figure largely among Australian exports. During 1974–75 exports amounting to 9,871 tonnes, valued at $582,000, were made, principally to Kuwait, Iran, Singapore and New Caledonia. Imports of hay are not recorded separately, but are considered to be negligible.

GREEN FEED OR SILAGE: AREA

('000 hectares)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71 .	495	105	487	132	144	32	..	..	1,396
1971–72 .	325	57	364	85	144	22	1	..	998
1972–73 .	402	73	480	88	124	34	1	1	1,204
1973–74 .	412	65	404	71	114	31	..	..	1,097
1974–75 .	304	44	341	59	75	27	3	..	853

SILAGE: PRODUCTION

(Tonnes)

Period	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Production during									
1970–71 season .	389,639	212,067	126,990	46,549	69,907	47,343	(*a*)	67	(*b*)892,562
1971–72 „ .	240,521	246,118	78,202	58,651	76,395	64,377	1,270	1,301	766,835
1972–73 „ .	180,648	148,494	50,546	22,878	50,567	25,017	5,269	211	483,630
1973–74 „ .	361,945	289,393	47,719	46,777	81,186	57,055	3,560	670	888,305
1974–75 „ .	211,307	139,891	36,641	35,298	49,057	50,146	6,731	3,000	532,071

(*a*) Not collected. (*b*) Incomplete; *see* footnote (*a*).

Soybeans

The soybean is cultivated widely throughout the world in temperate zones where hot damp summers provide adequate growing conditions. Although large quantities of beans are directly consumed in countries such as Japan, China (excluding Taiwan Province) and Indonesia, the greater part of world output is crushed for meal and oil. Major soybean producing countries are the United States of America, Brazil and China (excluding Taiwan Province).

The greater part of Australian production takes place in the Darling Downs, Burnett and Lockyer districts of Queensland and the Moree and Gunnedah districts of New South Wales. Production has risen rapidly in recent years to reach 73,723 tonnes in 1974–75.

Lupins

The lupin is an annual legume with a growing season closely following that of winter cereals. It prefers well drained soil but is otherwise fairly adaptable. In the past a small amount has been grown for grazing but a recent rapid expansion has followed the development in Australia of lupins with alkaloid-free seed. The seed has a high protein content and is finding use as a substitute for soya protein in human and animal food preparations. The main producing area is in the south-west of Western Australia where production reached 77,151 tonnes in 1974–75.

Sugar cane

The growing of sugar cane is restricted to those coastal areas in Queensland and northern New South Wales which have suitable climatic and soil conditions.

The Bureau of Sugar Experiment Stations in Queensland renders a useful service to the sugar industry by advocating and demonstrating better methods of cultivation and the more scientific use of fertilisers, etc., and by producing and distributing improved varieties of cane. Although the Bureau of Sugar Experiment Stations undertake some work relating to milling technology, Sugar Research Ltd, of Mackay, is the main body undertaking technological research in raw sugar milling practices.

Bulk handling of sugar

Bulk handling of raw sugar is now in operation throughout the Australian sugar industry. The comparatively small New South Wales sugar industry was converted to bulk handling in 1954. In Queensland, terminals for the bulk loading of sugar were opened at Mackay in 1957, at Lucinda and Bundaberg in 1958, at Townsville in 1959, at Mourilyan in 1960, and at Cairns in 1964. The capacity and handling rates of the terminals have been continually upgraded. Total bulk storage capacity at present is 1,475,000 tonnes. From the proceeds of the 1974 season's sugar the industry allocated $50,000,000 to finance upgrading of port and bulk storage facilities at Bundaberg and Lucinda. Bulk receiving facilities are in operation at all Australian refineries.

Mechanisation

For some years now practically the whole of the Queensland crop has been mechanically harvested. In New South Wales the changeover from manual to mechanical cutting was somewhat slow initially, but has advanced rapidly in recent years, 95 per cent of the crop having been cut by machines in 1975 compared with 22.4 per cent in 1972.

Area of sugar cane

A brief outline of the development of the industry was included in earlier issues of the Year Book (*see* No. 38, page 985). The area of sugar cane in Australia for recent seasons is shown in the following table. The whole area planted is not cut for crushing during any one season, there being always a considerable amount of young and 'stand-over' cane as well as a small quantity required for plants.

SUGAR CANE: AREA

(Hectares)

	New South Wales			*Queensland*			*Australia*			
Year	*Area crushed*	*Area of standover and newly-planted cane*	*Area cut for plants*	*Area crushed*	*Area of standover and newly-planted cane*	*Area cut for plants*	*Area crushed*	*Area of standover and newly-planted cane*	*Area cut for plants*	*Total*
1971–72 . .	9,330	7,418	268	224,407	31,369	4,923	233,737	38,787	5,191	277,714
1972–73 . .	9,361	6,497	192	232,338	30,023	4,853	241,699	36,520	5,045	283,264
1973–74 . .	9,917	7,056	201	215,937	43,254	4,827	225,854	50,310	5,028	281,192
1974–75 . .	9,911	8,252	275	243,231	29,223	5,959	253,142	37,475	6,234	296,851
1975–76p . .	11,000	n.a.	n.a.	245,800	n.a.	n.a.	256,800	n.a.	n.a.	n.a.

In 1975 the Queensland Government approved an increase of 13 per cent in the area assigned to the growing of cane in Queensland. This increase, which was allocated among existing cane growers, will provide, an additional 38,202 hectares, of cane land. Much of this new area is already growing cane which will be available for harvest in 1976–77.

Production of cane and sugar

The production of sugar cane in 1974–75 was a record 20,417,723 tonnes, one million tonnes greater than the previous record 1971–72 season. The production of raw sugar from 1945–46 is shown in plate 50 following.

SUGAR CANE: PRODUCTION OF CANE AND RAW SUGAR

(Tonnes)

Year	New South Wales		Queensland		Australia	
	Cane	*Sugar(a)*	*Cane*	*Sugar(a)*	*Cane*	*Sugar(a)*
1971–72	980,196	123,813	18,410,311	2,669,622	19,390,506	2,793,435
1972–73	841,106	102,941	18,087,205	2,714,062	18,928,311	2,817,003
1973–74	999,486	121,140	18,278,504	2,405,006	19,277,990	2,526,146
1974–75	996,654	121,008	19,421,069	2,727,533	20,417,723	2,848,541
1975–76p	890,000	n.a.	21,069,000	n.a.	21,959,000	n.a.

(*a*) Raw sugar at 94 net titre.

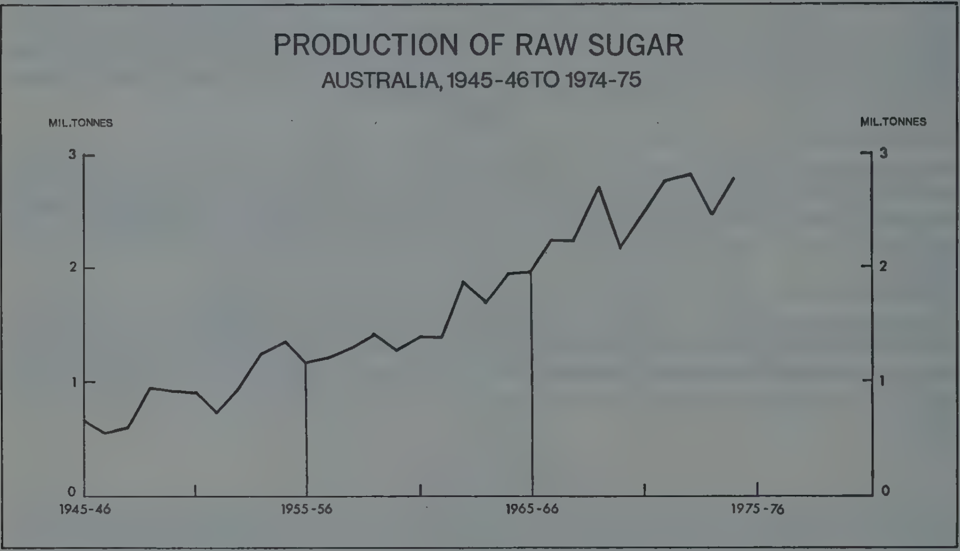


PLATE 50

Climatic conditions in some New South Wales areas are such that the crop matures in from twenty to twenty-four months, whereas in Queensland a period of from twelve to sixteen months is sufficient. The average yields of cane and sugar per hectare for recent years are shown below. Allowance should be made in interpreting these figures for the disparity in maturing periods noted above.

SUGAR CANE AND SUGAR: YIELD PER HECTARE

(Tonnes)

Year	New South Wales			Queensland			Australia		
	Cane per hectare crushed	*Sugar per hectare crushed*	*Cane to each tonne of sugar*	*Cane per hectare crushed*	*Sugar per hectare crushed*	*Cane to each tonne of sugar*	*Cane per hectare crushed*	*Sugar per hectare crushed*	*Cane to each tonne of sugar*
1971–72 . .	105.06	13.27	7.92	82.04	11.90	6.89	82.96	11.95	6.94
1972–73 . .	89.85	12.94	6.94	77.85	11.68	6.67	78.31	11.73	6.68
1973–74 . .	100.79	12.22	8.25	84.65	11.14	7.60	85.36	11.18	7.64
1974–75 . .	100.56	12.21	8.24	79.85	11.21	7.12	80.66	11.25	7.17
1975–76p . .	80.91	n.a.	n.a.	85.72	n.a.	n.a.	85.51	n.a.	n.a.

Production and utilisation of sugar

Details of the production and utilisation of sugar are shown below. Consumption is shown in terms of refined sugar, including that consumed in manufactured products.

SUGAR: PRODUCTION AND UTILISATION, AUSTRALIA

Year	Changes in stocks(a)	Production (raw)(b)	Exports(c)	Miscellaneous uses(d)	Consumption in Australia(e)	
					Total	*Per head*
	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	kg
1969–70	n.a.	2,201.9	1,386.6	n.a.	618.9	49.7
1970–71	n.a.	2,451.7	1,596.8	n.a.	636.3	50.8
1971–72	n.a.	2,579.4	2,033.0	n.a.	645.6	50.2
1972–73	n.a.	2,671.4	2,134.7	n.a.	664.4	50.8
1973–74	n.a.	2,519.4	1,812.2	n.a.	666.0	50.2

(*a*) Includes allowance for estimated sugar content of imported foodstuffs. (*b*) Year ended June; *tel quel* basis. Not comparable with production figures shown in production table as those relate to year ended March on a 94 net titre basis. (*c*) Raw and refined, including ships' stores and sugar in exported foodstuffs. (*d*) Includes refining losses and quantities used in golden syrup and treacle. (*e*) Includes sugar content of manufactured products consumed.

Sugar prices and returns

RAW SUGAR(*a*), AUSTRALIA

Year	Proportion exported	Average return per tonne received by millers and growers for (b)— Home consumption	Exports	Whole crop	Estimated value of crop
	per cent	$	$	$	$'000
1970–71	72.36	138.08	86.44	100.72	254,191
1971–72	75.09	136.51	99.35	108.61	303,290
1972–73	74.87	134.93	112.26	117.96	332,184
1973–74	70.94	132.40	129.55	130.38	329,336
1974–75	73.65	129.90	304.82	258.72	(c)736,821

(*a*) 94 net titre. (*b*) Includes repayments of Commonwealth Government loan. (*c*) Excludes the sum of $50 million retained from export sales proceeds to finance port and storage developments.

The estimated values stated, comprise the gross receipts from sales in Australia and overseas, less refining costs, freight, administrative charges, etc., and export charges. The deductions include concessions to the fruit industry and other rebates, which in 1974–75 amounted to $15,745 and also payment of the first instalment of the repayable Commonwealth Government arranged loan. The residual value thus obtained represents the net market value of all raw sugar sold, which is divided between the growers and millers in the approximate proportions of two-thirds and one-third respectively.

The wholesale price of refined sugar to the retailer of $203.46 per tonne and the capital cities retail price of 23 cents per kg remained unchanged from 19 June 1967 to 1 February 1975 when the two prices were raised to $219.50 and 27 cents respectively.

Exports of sugar

RAW AND REFINED SUGAR: EXPORTS, AUSTRALIA

	1971–72	*1972–73*	*1973–74*	*1974–75*	*1975–76*
Quantity . . . tonnes	2,007,983	2,084,430	1,781,478	1,995,667	2,012,538
Value . . . $'000 f.o.b.	210,593	249,759	223,313	644,499	569,722

Tobacco

Tobacco is a summer-growing annual which requires a temperate to tropical climate, adequate soil moisture and a frost-free period of approximately five months. In Australia almost all tobacco is grown under irrigation. Because of specialised requirements, production is limited to areas with suitable soils and climate. The main centres of production are the Mareeba-Dimbulah districts of north Queensland and Myrtleford in north-eastern Victoria. Other areas where tobacco is grown include Bundaberg, Beerwah and Texas (Queensland), Ashford (New South Wales) and Wangaratta (Victoria). All tobacco grown in Australia is of the flue-cured type except for small quantities of burley tobacco produced mainly in Victoria.

Tobacco area and production

The area planted to tobacco in 1974–75 was 28.6 per cent below the record area established in 1962-63. Production at 15,462,000 kg was 11.1 per cent below the previous record established in 1970–71. The following table shows the area and production of tobacco in the tobacco growing States in the last five years.

TOBACCO: AREA AND PRODUCTION

Year	*N.S.W.*	*Vic.*	*Qld*	*Aust.*
AREA (HECTARES)				
1970–71	1,231	4,242	5,427	10,900
1971–72	1,273	3,844	4,928	10,045
1972–73	898	4,068	4,632	9,598
1973–74	837	3,940	4,501	9,278
1974–75	898	3,926	4,424	9,248
PRODUCTION OF DRIED LEAF ('000 kg)				
1970–71	1,270	6,902	8,956	17,128
1971–72	1,855	5,765	8,395	16,015
1972–73	1,449	5,769	8,203	15,421
1973–74	1,252	5,634	8,000	14,886
1974–75	1,369	6,086	8,007	15,462

Imports and exports of tobacco

Imports of tobacco and tobacco manufactures into Australia during 1974–75 were valued at \$41.6 million. This included 13.1 million kg of unmanufactured tobacco valued at \$26.1 million. Exports of tobacco and tobacco manufactures during 1974–75 were valued at \$4,128,000, including Australian produce, \$3,134,000.

Cotton

This annual shrub requires a hot climate and inter-row weed control. Lint (long fibres) is extracted from the seed cotton in the ginneries and is used for yarn. The residue, consisting of linters (short fibres), kernels and hulls (outer seed coat), is treated in oil mills. Linters are used in the manufacture of felts and other materials, where fibre length is of little importance. The kernels when crushed produce an oil which is used for both edible and industrial purposes. The residual meal is a useful high protein stockfeed; the hulls may be used as fuel.

Until 1964 cotton growing was mainly confined to Queensland, most of it being grown under conditions of natural rainfall. Since then there has been an increasing trend in the use of irrigation. A sound industry has been established in the Namoi and Macquarie Valleys in New South Wales with water provided by the Keepit and Burrendong Dams. More than three-quarters of Australia's raw cotton requirements are now produced in that area with the remainder produced in Queensland. In 1963 cotton was introduced into the Ord River area of Western Australia, but due to rising production costs and the continuing problem of insect infestation the commercial production of cotton in that area ceased with the 1975 crop. Nearly all Australian cotton is now grown with the assistance of irrigation and yields compare more than favourably with those obtained by traditional overseas cotton producing countries. Australian production currently satisfies all the requirements of local mills for short and medium staple cotton and should in the future, supply the comparatively small quantities of longer staple combing cottons currently imported. Raw cotton production in 1975 was 146,586 bales (a bale is approximately 225 kg in weight) compared with 135,536 bales produced in the previous year. The 1976 crop was reduced by floods and the preliminary estimates place this year's crop at only 113,560 bales. Some 69,689 bales of cotton were exported from the 1975 crop compared with 32,892 bales in the previous year. It is estimated that only about 10,000 bales will be available for export from the 1976 crop. The high level of exports in the previous year reflected the decrease in the demand for cotton on the domestic market due to difficulties experienced in the textile industry.

Cotton area, production and yield per hectare

COTTON: AREA, PRODUCTION AND YIELD PER HECTARE

Year	*N.S.W.*	*Qld*	*W.A.*	*Aust.*
AREA (HECTARES)				
1970–71	26,403	5,213	2,918	34,534
1971–72	29,310	6,897	3,442	39,649
1972–73	31,747	8,008	3,861	43,616
1973–74	31,020	7,105	3,591	41,716
1974–75	27,511	7,386	3,642	38,539
PRODUCTION (UNGINNED)(*a*)('000 kg)				
1970–71	38,611	8,705	9,435	56,751
1971–72	100,822	18,585	12,564	131,971
1972–73	71,906	13,464	11,271	96,641
1973–74	58,806	18,390	9,197	86,393
1974–75	78,812	17,909	6,603	103,324
YIELD PER HECTARE (kg)				
1970–71	1,462	1,670	3,233	1,643
1971–72	3,440	2,695	3,650	3,328
1972–73	2,265	1,681	2,919	2,216
1973–74	1,896	2,588	2,561	2,070
1974–75	2,865	2,425	1,813	2,681

(*a*) Unginned cotton is seed cotton prior to being converted in the ginnery to raw (or lint) cotton.

Production of ginned cotton for each of the three years 1971–72 to 1973–74 was 38,960,000 kg, 33,669,000 kg and 28,496,000 kg respectively. Figures for 1970–71 are not available.

The gross value of cotton for each of the five years from 1970–71 to 1974–75 was $13,293,000, $30,117,000, $32,625,000, $26,636,000 and $29,270,000 respectively.

Imports and exports of raw cotton

RAW COTTON(*a*): IMPORTS AND EXPORTS, AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Imports—						
Quantity	'000 kg	6,995	8,939	3,830	8,401	4,021
Value	$'000 f.o.b.	4,313	5,784	2,673	9,297	4,804
Exports—						
Quantity	'000 kg	7,416	2,421	22,290	3,051	7,663
Value	$'000 f.o.b.	3,431	1,555	11,347	1,927	5,362

(*a*) Excludes linters.

Japan and Hong Kong were the principal importing countries, taking 3,247,913 kg and 2,661,377 kg respectively in 1974–75.

Peanuts

Peanuts, or groundnuts, are a sub-tropical legume (and hence summer growers), the pods of which mature beneath the surface of the soil. They thus require well drained, light textured soils. At harvest the plant is pulled, wind-rowed, field-cured for two to four weeks, and then threshed to recover the pods. The main products of the industry are nuts, peanut oil and oil cake.

In Australia, peanuts for crushing for oil arise as a by-product in the production of nuts for edible purposes. The oil is used extensively as a cooking and salad oil and in the manufacture of margarine.

The production of peanuts in Australia is confined mainly to Queensland, although small quantities are grown in New South Wales, the Northern Territory and, in some years, Western Australia.

PEANUTS: AREA AND PRODUCTION

	Area (hectares)			*Production ('000 kg)*		
Year	*N.S.W.*	*Qld*	*Aust.*	*N.S.W.*	*Qld*	*Aust.*
1970–71	158	38,403	(*a*)38,584	262	30,846	(*a*)31,123
1971–72	227	33,485	(*a*)33,752	242	45,774	(*a*)46,060
1972–73	336	28,787	(*a*)29,136	504	37,992	(*a*)38,496
1973–74	18	25,724	25,932	86	29,119	29,208
1974–75	204	23,742	24,131	494	31,323	31,969

(*a*) Incomplete; excludes Western Australia.

The gross value of the 1974–75 crop was $12,006,000 which was approximately $1,121,000 more than in 1973–74. Total supplies available for consumption in Australia in 1973–74 were 20,736 tonnes in shell equivalent. Exports of peanuts and peanut products for 1974–75 were 9,920 tonnes.

Linseed

The flax plant is a summer-growing annual. Varieties have been developed for the production of either fibre or linseed. Linseed, when crushed, yields an industrial oil used extensively in the manufacture of paint and linoleum. The introduction of synthetics into these fields has reduced the demand for linseed oil. Flax for the production of fibre was last recorded in 1964–65. Production of linseed during 1974–75 was 33,049 tonnes.

The main producing areas are the wheat belt of New South Wales, western and north-eastern districts of Victoria, the Esperance district of Western Australia, the Darling Downs in Queensland, and the south-eastern district of South Australia.

LINSEED: AREA AND PRODUCTION

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Aust.*
Area (hectares)—						
1970–71	20,538	6,830	3,556	281	10,421	41,626
1971–72	9,391	3,694	1,872	172	4,794	19,923
1972–73	6,762	5,843	2,907	534	254	16,300
1973–74	10,508	4,336	1,852	829	252	17,777
1974–75	18,237	4,924	8,543	3,165	693	35,562
Production (tonnes of linseed)—						
1970–71	17,189	6,472	1,968	258	4,918	30,805
1971–72	3,713	3,388	1,301	92	1,735	10,229
1972–73	1,889	5,471	1,948	419	64	9,791
1973–74	7,200	4,668	1,504	829	123	14,324
1974–75	14,997	3,812	10,720	3,162	358	33,049

Hops

Hops are grown from perennial rootstocks over deep, well-drained soils in localities sheltered from the wind. The hop-bearing vine shoots are carried upon wire and coir trellises, from which they are later harvested. The green hops are kiln-dried and bleached with sulphur dioxide fumes, following which the cured hops are pressed into bales.

Hop growing in Australia is confined to the Derwent, Huon and Channel areas in the south-east, and the Scottsdale-Ringarooma district in the north-east of Tasmania, and the Ovens and King Valleys in Victoria. A small area is also under hops in Western Australia, near Manjimup, but details are not available for publication.

Production and imports of hops

The production of hops in Australia is adequate to meet local requirements, and in recent years small quantities have been exported. In the following table details of the production and imports of hops and the quantity of hops used in breweries are shown for recent years. Exports of hops are negligible and are not recorded separately.

HOPS: PRODUCTION AND DISPOSAL, AUSTRALIA

Year	*Production(a)*	*Imports*	*Net available supplies(b)*	*Quantity used in breweries*
	'000 kg	'000 kg	'000 kg	'000 kg
1970–71 . . .	1,706	18	1,724	1,761
1971–72 . . .	1,847	20	1,867	1,553
1972–73 . . .	2,113	37	2,150	1,294
1973–74 . . .	2,864	16	2,880	1,335
1974–75 . . .	2,270	20	2,270	n.a.

(*a*) Excludes production in Western Australia. (*b*) Disregards movements in stocks.

Rapeseed

Rapeseed is obtained from several varieties of brassica, which are cultivated in temperate and warm temperate zones for their oil-producing seed.

The introduction of wheat quotas in Australia from 1970–71 to 1972–73 and the buoyant world market for oilseeds brought about an expansion of areas sown to rape in New South Wales, Western Australia, Victoria and South Australia.

Domestic production increased from 4,464 tonnes in 1969–70 to 54,614 tonnes in 1971–72 and 25,037 tonnes in 1972–73 but subsequently declined to 12,750 tonnes for 1973–74 and 8,533 tonnes in 1974–75 as a result of disease problems.

Rapeseed oil is used mainly as a salad and cooking oil with some minor amounts being utilised for industrial purposes. A protein meal is derived as a by-product in the crushing process.

Safflower

Safflower is best cultivated either in the warm temperate zones or as a winter crop in the tropical or sub-tropical regions, on moderately fertile, weed-free, clay or sandy loams. Adequate moisture is required up to the flowering stage, after which it is relatively drought resistant. The soil preparation and sowing techniques are similar to those employed for small grains; it is usually harvested by headers when the seed is hard and dry. The oil, produced by crushing, is used in the manufacture of margarine, soaps, paints, varnishes, enamels, and textiles.

SAFFLOWER: AREA AND PRODUCTION

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				AREA (HECTARES)					
1970–71	19,834	5,071	2,053	170	546	..	..	..	27,674
1971–72	18,675	1,272	12,482	197	1,183	..	..	..	33,809
1972–73	5,782	556	3,257	74	955	..	..	..	10,624
1973–74	1,584	971	9,575	181	138	..	..	..	12,449
1974–75	5,487	2,813	27,575	363	(*a*)	..	..	..	36,238
				PRODUCTION (TONNES)					
1970–71	8,291	1,569	371	83	142	..	..	..	10,456
1971–72	10,592	722	3,462	81	541	..	..	..	15,398
1972–73	1,538	328	2,126	46	135	..	..	..	4,173
1973–74	320	520	5,928	82	10	..	..	..	6,860
1974–75	2,005	1,269	26,949	279	(*a*)	..	..	..	30,502

(*a*) Not available for publication.

Imports of crude safflower seed oil in 1973–74 and 1974–75 totalled 1,130 and 4,652 tonnes respectively. These imports came mainly from the United States of America.

Sunflower seed

Sunflowers are summer growing annuals produced mainly under raingrown conditions in the three eastern mainland States of Australia. The cultivation of sunflowers has developed rapidly in recent years to make it the major oilseed crop.

The seed for which the plant is cultivated yields a high quality dual purpose oil and a by-product protein meal used for stockfeed. Main uses for the oil are in the manufacture of margarine, as a salad and cooking oil, and for industrial purposes.

The introduction of wheat quotas and the development of high oil yielding varieties of sunflower seed resulted in an increase in Australian production from 13,248 tonnes in 1969–70 to a record 147,531 tonnes in 1971–72. Production in 1974–75 amounted to 113,375 tonnes.

Vegetables for human consumption

Area, production and trade

Because of the wide diversity of climatic conditions across Australia, supplies for main city markets are drawn from widely different areas, depending upon the times of maturity of the various crops. Apart from potatoes and onions, which are sold in some States through marketing boards, the bulk of vegetable trading takes place at the metropolitan markets of the cities concerned.

Details of the areas planted and production of individual kinds of vegetables are shown below. Certain particulars shown are incomplete in that details for specific vegetables in some States are either not available or are not available for publication. For further information *see* the bulletin *Crop Statistics* (10.58). Details of the estimated consumption of vegetables for a series of years are given in the chapter Miscellaneous.

VEGETABLES FOR HUMAN CONSUMPTION: AUSTRALIA

Vegetable	*1972–73*		*1973–74*		*1974–75*	
	Area sown	*Production*	*Area sown*	*Production*	*Area sown*	*Production*
	hectares	tonnes	hectares	tonnes	hectares	tonnes
Asparagus	2,450	6,756	2,015	5,516	1,798	4,626
Beans, french and runner	7,512	35,533	8,312	40,226	8,601	40,862
Beetroot	832	22,802	886	25,988	850	27,417
Cabbages and brussel sprouts	2,629	70,738	2,761	72,927	2,903	84,638
Carrots	2,935	81,574	3,155	86,546	3,512	97,551
Cauliflowers	2,568	77,829	2,464	72,804	2,495	71,901
Celery	390	21,678	332	15,953	495	21,599
Cucumbers	1,089	13,665	1,105	13,457	1,014	11,452
Lettuce	2,183	36,419	2,294	35,751	1,978	32,555
Onions	4,464	93,234	4,189	93,686	4,395	108,102
Parsnips	436	9,117	447	8,128	457	8,739
Peas, green	21,540	106,743	19,362	102,900	18,500	121,579
Potatoes	36,607	720,704	34,113	649,197	37,626	735,975
Tomatoes	7,656	177,522	7,082	135,647	7,868	168,933
Turnips, swede and white	803	10,308	591	7,159	747	9,252
All other	16,852	..	16,367	..	17,315	..
Total	**110,947**	..	**105,475**	..	**110,554**	..

Processed vegetables

Total production of canned vegetables in 1974–75 amounted to 132,380,000 kg. The principal type produced were baked beans (including pork and beans), 23,917,000 kg; beetroot, 28,119,000 kg; green peas (excluding mint processed peas), 10,597,000 kg; tomatoes, 9,127,000 kg; asparagus, 3,588,000 kg; and sweet corn, 10,785,000 kg. Production of potato crisps, chips and flakes during 1974–75 was 16,073,000 kg.

There has been rapid development in the quick-frozen vegetable industry. In 1974–75 the production was 105,540,000 kg, of which 43,633,000 kg were peas, 26,760,000 kg were beans and 15,506,000 kg were potatoes.

Exports and imports of vegetables

Overseas exports of fresh and frozen vegetables during 1974–75 amounted to 34,053,733 kg valued at $7,927,395; dried vegetables, 5,195,922 kg valued at $1,524,851; perserved vegetables, 452,248 kg valued at $339,884; and other prepared or preserved vegetables, 2,660,499 kg valued at $1,606,482.

Imports of fresh and frozen vegetables during 1974–75 were valued at $47,010,727.

Potatoes

This crop requires deep friable soils, which in Australia are usually basaltic, alluvial or swampy in origin. Fertiliser requirements, which are generally high, vary with the type of soil. While potatoes require only moderate temperatures for growth, the greatest proportion of Australia's potatoes are grown as a summer crop because potato plants are killed by heavy frosts. In recent years an increasing proportion of potatoes has been grown under irrigation and potato growing has become increasingly mechanised with individual growers having larger areas and becoming more specialised.

Seed certification schemes or approvals which operate in most States provide supplies of seed. In Australia potatoes are used almost entirely for human consumption or seed. Approximately 25 per cent of Australian potato consumption is in a processed form and this proportion is rising. The main processing potato products are crisps, frozen chips, dehydrated granule and flake, soup, baby foods, salads and canned potatoes.

POTATOES: AREA, PRODUCTION AND YIELD PER HECTARE

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
				AREA (HECTARES)					
1970–71 . .	8,944	14,150	6,445	2,898	2,528	3,640	9	5	38,619
1971–72 . .	9,987	13,986	7,365	2,775	2,684	3,593	11	(*a*)	(*b*)40,401
1972–73 . .	9,134	13,120	5,960	2,673	2,378	3,330	12	(*a*)	(*b*)36,607
1973–74 . .	8,502	12,474	5,279	2,477	2,242	3,127	12	(*a*)	(*b*)34,113
1974–75 . .	9,302	13,010	6,068	2,747	2,356	4,143	(*a*)	(*a*)	(*b*)37,626
				PRODUCTION (TONNES)					
1970–71 . .	145,688	303,900	110,403	72,526	69,150	72,591	(*a*)	46	(*b*)774,304
1971–72 . .	171,801	306,708	132,618	71,741	68,420	70,370	144	(*a*)	(*b*)821,802
1972–73 . .	130,301	286,990	92,164	69,483	63,282	78,286	198	(*a*)	(*b*)720,704
1973–74 . .	124,586	254,021	86,529	60,491	60,603	62,866	101	(*a*)	(*b*)649,197
1974–75 . .	117,903	282,547	107,587	70,849	61,479	95,610	(*a*)	(*a*)	(*b*)735,975
				YIELD PER HECTARE (TONNES)					
1970–71 . .	16.289	21.477	17.130	25.026	27.354	19.943	(*a*)	9.200	(*b*)20.050
1971–72 . .	17.202	21.930	18.007	25.853	25.492	19.585	13.091	(*a*)	(*b*)20.341
1972–73 . .	14.265	21.874	15.464	25.994	26.611	23.509	16.500	(*a*)	(*b*)19.688
1973–74 . .	14.654	20.364	16.391	24.421	27.031	20.104	8.417	(*a*)	(*b*)19.031
1974–75 . .	12.675	21.718	17.730	25.791	26.095	23.078	(*a*)	(*a*)	(*b*)19.560

(*a*) Not available for publication. (*b*) Incomplete; *see* individual Territories.

The production of potatoes from 1945–46 is shown in plate 51, below.

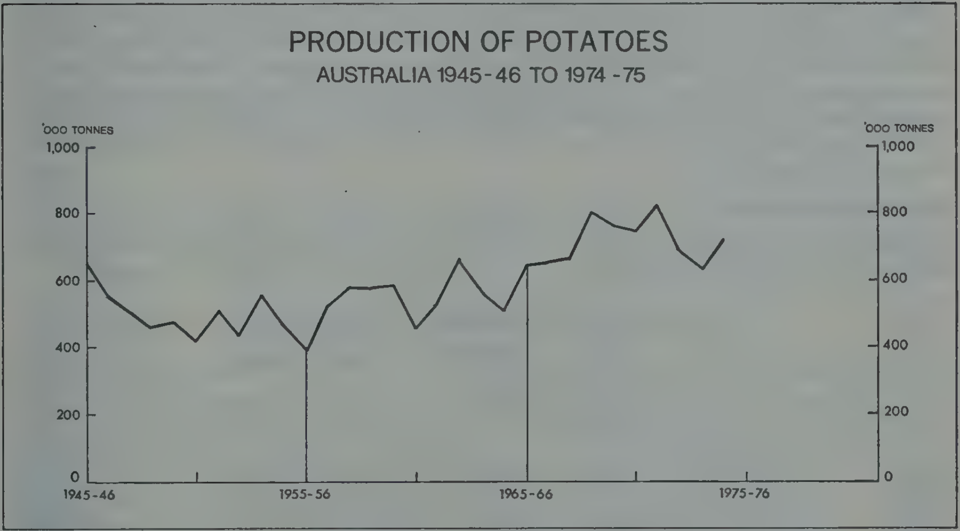


PLATE 51

Potato marketing. The majority of table potatoes are marketed through potato merchants and agents. In some instances they are marketed through a primary merchant and then a secondary merchant (wholesale). In South Australia and Western Australia potato marketing is controlled by potato marketing boards.

Overall, probably more than half of the potatoes used for processing are purchased by forward contract made directly by the processor with the grower. The remainder of the processors' requirements are usually purchased from merchants and in some instances merchants' contracts with growers as agents for processors. Seed potatoes are purchased either through a merchant or directly from a seed grower.

Consumption and export of potatoes. The annual consumption of potatoes in Australia during each of the three years 1971–72 to 1973–74 amounted to 758,900 tonnes, 635,900 tonnes and 571,200 tonnes respectively or 58.8 kg, 48.6 kg and 43.1 kg respectively per head of population. These figures exclude the quantities used for seed, which averaged about 42,600 tonnes annually over this period. Details showing exports and imports for recent years are given in the following table.

POTATOES: EXPORTS AND IMPORTS, AUSTRALIA

Year	*Exports* Quantity	*Exports* Value	*Imports* Quantity	*Imports* Value
	tonnes	$'000 f.o.b.	tonnes	$'000 f.o.b.
1970–71	11,659	978	..	..
1971–72	11,952	1,039	..	..
1972–73	10,558	952	..	..
1973–74	11,351	1,387	583	71
1974–75	12,429	1,425	..	..

Australia's principal markets are Papua New Guinea, Singapore, New Caledonia and Sri Lanka.

Fruit

The varieties of fruit grown differ in various parts of the States, ranging from pineapples, papaws and mangoes in the tropics to strawberries, raspberries and currants in the colder parts of the temperate zone. In New South Wales citrus fruit (oranges, lemons, etc.) and bananas are the principal crops, although apples, peaches, plums, pears and cherries are grown extensively. The principal fruits grown in Victoria are apples, pears, peaches, oranges, and apricots. In Queensland apples, pineapples, bananas, oranges, mandarins, peaches and plums are the major fruits cultivated. In South Australia, in addition to oranges, apples, peaches, apricots, and pears, almonds and olives are grown extensively. In Western Australia apples, oranges, plums, and pears are the chief fruits. In Tasmania apples are by far the most important type of fruit grown, but small fruit, such as currants, raspberries and gooseberries, are also grown extensively, the balance of the area being occupied mainly with pears and apricots.

Area and production of fruit

The total area under fruit in Australia in 1974–75 was 102,760 hectares, 18.3 per cent less than the record area established in 1965–66.

FRUIT (EXCLUDING GRAPEVINES): AREA(*a*)

(hectares)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71	37,448	26,958	22,157	18,333	9,627	8,432	49	15	123,019
1971–72	39,215	27,206	22,424	17,190	9,129	7,822	88	14	123,088
1972–73	34,887	25,785	22,111	16,730	8,680	7,223	70	14	115,500
1973–74	33,679	23,066	21,113	16,906	7,966	5,996	62	15	108,803
1974–75	31,597	21,784	20,149	16,620	7,822	4,748	23	18	102,760

(*a*) Bearing and not bearing.

ORCHARD FRUIT (INCLUDING EDIBLE TREE NUTS), TOTAL NUMBER OF TREES 1974–75

('000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Citrus—									
Oranges—									
Navel	888	249	91	562	123	..	..	..	1,913
Valencia	1,476	411	97	887	195	..	..	..	3,065
Other	31	8	43	13	2	..	..	..	97
Total oranges	*2,395*	*668*	*231*	*1,461*	*320*	..	*1*	..	*5,076*
Lemons and limes	361	131	39	128	45	..	..	..	705
Mandarins	153	58	226	79	54	..	..	..	570
Grapefruit	146	73	25	79	16	..	..	..	339
Pome—									
Apples	1,356	1,363	1,121	591	1,042	1,525	..	5	7,004
Pears	205	1,587	108	178	90	79	..	(*a*)	(*b*)2,246
Quinces	1	4	(*a*)	2	..	..	..	..	(*b*)8
Stone—									
Apricots	101	241	43	420	16	34	..	..	855
Cherries	330	156	1	65	8	7	..	..	567
Nectarines	38	47	45	26	9	2	..	..	167
Peaches	494	886	135	359	64	3	..	(*a*)	(*b*)1,940
Plums and prunes	440	140	141	74	80	3	..	(*a*)	(*b*)879
Other orchard n.e.i.—									
Custard apples	1	..	16	..	(*a*)	..	(*a*)	..	(*b*)16
Figs	2	1	(*a*)	6	1	..	..	..	(*b*)9
Mangoes	..	..	53	..	1	..	..	..	54
Olives	13	111	..	63	14	..	..	..	200
Nuts—									
Almonds	2	109	..	716	1	..	..	..	827
Macadamia	63	..	141	..	..	..	..	..	204
Walnuts	1	8	..	6	2	..	..	..	17

(*a*) Not available for publication. (*b*) Incomplete; *see* footnotes to individual States.

ORCHARD FRUIT (INCLUDING EDIBLE TREE NUTS), PRODUCTION 1974–75

(Tonnes)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Citrus—									
Oranges—									
Navel	49,210	14,594	9,236	50,307	2,730	..	(*a*)	..	(*b*)126,077
Valencia	93,673	25,514	8,934	75,325	5,328	..	(*a*)	..	(*b*)208,774
Other	1,422	579	3,095	821	42	..	..	..	5,959
Total oranges	*144,306*	*40,687*	*21,265*	*126,456*	*8,099*	..	*26*	..	*340,839*
Lemons and limes	15,392	5,667	3,980	7,360	2,460	..	12	..	34,871
Mandarins	5,298	2,762	13,550	3,371	1,152	..	4	..	26,137
Grapefruit	6,309	3,561	1,842	5,692	366	..	11	..	17,781
Pome—									
Apples	76,638	82,238	38,344	23,181	52,023	95,502	..	48	367,974
Pears	9,580	125,498	3,365	11,380	4,930	3,220	..	(*a*)	(*b*)157,973
Quinces	26	143	(*a*)	117	2	4	..	..	(*b*)292
Stone—									
Apricots	4,294	8,950	788	12,535	478	292	..	..	27,337
Cherries	5,438	3,504	6	779	31	45	..	..	9,803
Nectarines	1,007	820	623	958	300	29	..	..	3,737
Peaches	25,262	38,444	1,933	22,671	2,163	34	..	..	90,507
Plums and prunes	11,651	3,276	2,789	1,392	3,931	133	..	..	23,172
Other orchard n.e.i.—									
Custard apples	1	..	220	..	..	..	(*a*)	..	(*b*)221
Figs	192	25	(*a*)	145	9	..	..	..	(*b*)371
Mangoes	11	..	1,139	..	8	..	32	..	1,190
Olives	460	1,120	..	737	204	..	..	..	2,521
Nuts—									
Almonds	2	15	..	996	..	..	..	..	1,013
Macadamia	28	..	123	..	..	..	..	..	150
Walnuts	1	71	..	11	6	..	..	..	88

(*a*) Not available for publication. (*b*) Incomplete; *see* footnotes to individual States.

BERRY AND OTHER FRUITS (EXCLUDING GRAPEVINES) 1974–75

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
TOTAL AREA BEARING AND NOT BEARING (HECTARES)									
Small and berry fruit—									
Currants (black, red)	..	..	..	(*a*)	..	324	..	..	(*b*)324
Raspberries	..	35	..	4	..	190	..	..	229
Strawberries	49	153	70	69	13	18	..	..	372
Other	11	66	24	7	3	47	..	..	158
Other fruit—									
Bananas	5,676	..	2,109	..	186	..	11	..	7,982
Papaws	12	..	273	..	..	..	(*a*)	..	(*b*)285
Passionfruit	73	20	252	..	29	..	..	..	374
Pineapples	35	..	5,816	..	(*a*)	..	(*a*)	..	(*b*)5,851
PRODUCTION (TONNES)									
Small and berry fruit—									
Currants (black, red)	..	..	..	(*a*)	..	1,086	..	..	(*b*)1,086
Raspberries	..	114	..	15	..	1,216	..	..	1,345
Strawberries	328	1,138	756	520	188	94	..	..	3,024
Other fruit—									
Bananas	80,847	..	31,621	..	5,720	..	138	..	118,326
Papaws	28	..	2,348	..	..	..	(*a*)	..	(*b*)2,376
Passionfruit	357	25	3,005	..	96	..	..	..	3,483
Pineapples	333	..	110,118	..	(*a*)	..	3	..	(*b*)110,454

(*a*) Not available for publication. (*b*) Incomplete; *see* individual States.

Principal fruit crops

PRINCIPAL FRUIT CROPS: PRODUCTION AND GROSS VALUE OF PRODUCTION, AUSTRALIA

Year	*Apples*	*Apricots*	*Bananas*	*Oranges*	*Peaches*	*Pears*	*Pineapples*	*Plums and prunes*
PRODUCTION ('000 TONNES)								
1970–71	443	53	133	322	123	188	118	31
1971–72	360	47	128	291	120	186	128	24
1972–73	431	44	124	352	116	190	126	27
1973–74	335	37	125	310	81	162	115	23
1974–75	368	27	118	341	91	158	110	23
GROSS VALUE OF PRODUCTION ($'000)								
1970–71	58,339	9,392	20,033	33,030	15,760	20,855	9,722	6,360
1971–72	50,310	7,764	20,958	30,423	15,876	19,448	9,629	5,228
1972–73	63,483	9,170	28,217	33,556	17,678	23,942	12,197	5,974
1973–74	63,733	9,141	21,878	33,661	14,494	24,938	11,028	7,031
1974–75	73,617	9,032	31,323	43,301	24,199	26,199	11,914	8,463

Production and consumption of jams and jellies and preserved fruit

During 1974–75 output of jams, conserves, fruit spreads, etc., amounted to 30,285,000 kg, while output of preserved fruit amounted to 240,784,000 kg. Of the latter figure, peaches accounted for 72,094,000 kg, pears 53,342,000 kg, pineapples 31,344,000 kg and mixed fruits 42,228,000 kg.

Details of the estimated consumption of fruit and fruit products for a series of years are shown in the chapter, Miscellaneous.

Imports and exports of fruit and fruit products

The imports of fresh fruit into Australia are negligible, while those of dried fruit consist mainly of dates, approximately 90 per cent of which are obtained from Iraq and Iran, the bulk of the remainder coming from the United States of America and China (excluding Taiwan Province). A considerable export trade in fresh and chilled, and dried fruit is carried on by Australia with overseas countries. The values of the shipments in 1974–75 amounted to $28,899,000 for fresh and chilled fruit, and $21,405,000 for dried fruit. Apples constitute over half of the fresh fruit exported, although exports of pears and citrus fruits are considerable.

FRESH AND CHILLED FRUIT: EXPORTS, AUSTRALIA

Year	*Apples*		*Pears*		*Citrus*		*Total value(a)*
	Quantity	*Value*	*Quantity*	*Value*	*Quantity*	*Value*	
	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	$'000 f.o.b.
1970–71	142,073	21,881	34,486	6,411	26,998	3,721	32,971
1971–72	98,326	15,889	34,434	6,969	34,712	4,824	28,680
1972–73	116,974	18,016	42,309	9,141	32,554	4,682	32,929
1973–74	124,789	20,076	36,694	7,665	46,624	4,395	32,956
1974–75	78,548	16,085	28,063	8,200	15,362	3,286	28,900

(a) Includes exports of all other fresh and chilled fruit.

The quantity and value of overseas imports and exports of dried fruit, other than sultanas, raisins and currants, are shown below.

DRIED TREE FRUIT(a): IMPORTS AND EXPORTS, AUSTRALIA

Year	*Imports*		*Exports*	
	Quantity	*Value*	*Quantity*	*Value*
	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.
1970–71	3,906	989	2,281	1,537
1971–72	3,830	1,046	3,422	2,208
1972–73	4,897	1,165	2,917	2,313
1973–74	4,701	1,273	1,944	2,119
1974–75	4,980	2,336	899	1,284

(a) Excludes sultanas, raisins and currants dealt with separately under Vineyards (*see* below).

Exports of jams and jellies in 1974–75 were 2,844,000 kg valued at $1,522,000, compared with 4,698,000 kg, valued at $1,556,000 in 1973–74. Imports of jams and jellies in 1974–75 were 2,088,000 kg, valued at $1,205,000, compared with 2,022,000 kg, valued at $848,000 in 1973–74.

EXPORTS OF CANNED OR BOTTLED FRUIT: AUSTRALIA

Year	Peaches		Pears		Fruit salad		Apricots		Total Value(a)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	$'000 f.o.b.
1970–71	49,986	13,971	51,377	14,380	21,377	7,201	6,697	1,924	42,891
1971–72	47,729	13,202	37,825	10,809	18,159	6,337	5,470	1,623	36,462
1972–73	69,112	18,638	53,386	15,499	19,855	6,845	6,843	2,102	48,223
1973–74	69,312	16,832	62,965	15,395	19,827	5,959	7,132	1,842	44,542
1974–75	25,351	9,743	32,323	11,949	12,245	5,714	3,485	1,464	33,581

(*a*) Includes exports of all other canned or bottled fruit.

Exports of pulped fruit during 1974–75 amounted to 251,000 kg valued at $120,000.

The total value of preserved fruit and fruit preparations (including fruit juices) imported into Australia during 1974–75 was $6,565,000. The value of exports of fruits juices in 1974–75 was $2,951,000.

Vineyards

Grapes require a warm to hot climate and a predominantly winter rainfall. Freedom from late spring frosts is essential. They are grown for wine-making, drying and, to a minor extent, for table use. In Australia, wine is produced very largely from irrigated crops, as are dried fruits. Some of the better known wine producing areas are the Murray Valley (South Australia and Victoria), Barossa Valley and Southern Vales Areas (South Australia), the Murrumbidgee Irrigation Areas and the Hunter Valley (New South Wales), the Mildura, Rutherglen and Stawell districts of Victoria, and the Swan Valley (Western Australia). Nearly all the dried fruit is produced along the River Murray and its tributaries, with small localised areas in other States.

Area of vineyards

The area under vineyards in the 1974–75 season in Victoria and South Australia constituted 74 per cent of the total area of the vineyards.

VINEYARDS: AREA(*a*)
(Hectares)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Aust.
1970–71	11,247	20,612	1,556	27,653	2,714	63,782
1971–72	12,956	20,794	1,571	28,769	2,727	66,817
1972–73	13,275	21,618	1,560	29,528	2,566	68,547
1973–74	14,719	21,594	1,594	29,602	2,479	69,988
1974–75	14,463	22,348	1,537	30,366	2,602	71,316

(*a*) Bearing and not bearing.

Wine industry

Australia produces wine of every type and also brandy. In recent years there has been a distinct trend towards greater consumption and production of unfortified or table wines. Until 1957–58 production of these wines (which include burgundy, claret, riesling, sauterne, and sparkling wines) was less than half that of the fortified varieties (sherries, ports, etc.). By 1968–69 production of table wines had exceeded the volume of fortified varieties and in 1974–75, production of unfortified wines exceeded fortified wines by 98 million litres.

Production and consumption of wine and brandy

In 1974–75 the total production of wine (beverage and distillation) in Australia was 361.2 million litres, while total consumption of beverage wine was 168.0 million litres (12.5 litres per head of population). Similar particulars for 1973–74 were 294.7 million litres and 148.1 million litres (11.2 litres per head of population) respectively.

WINE: PRODUCTION(*a*)

('000 litres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Aust.*(*b*)
1970–71 . . .	46,409	30,079	(*c*)	173,899	(*c*)	254,965
1971–72 . . .	66,545	35,835	(*c*)	183,276	(*c*)	290,239
1972–73 . . .	61,580	25,840	(*c*)	188,315	(*c*)	279,943
1973–74 . . .	76,541	46,089	(*c*)	167,611	(*c*)	294,666
1974–75 . . .	74,314	54,278	(*c*)	227,861	(*c*)	361,177

(*a*) Beverage and distillation wine. (*b*) Includes Tasmania. (*c*) Not available for publication.

BRANDY: PRODUCTION, SOUTH AUSTRALIA AND AUSTRALIA

('000 litres alcohol)

Year	*S.A.*	*Aust.*(*a*)
1970–71	3,496	3,849
1971–72	3,840	4,485
1972–73	3,064	3,589
1973–74	1,871	2,152

(*a*) Includes New South Wales and Victoria, for which separate details are not available for publication.

Exports and imports of wine and brandy

Principal markets for exports of Australian wine are the United Kingdom, Canada and New Zealand. During 1974–75 these countries received 832,000 litres, 2,201,000 litres and 801,000 litres respectively. Exports of Australian-produced wine and imports of wine for recent years are shown in the following table.

WINE: EXPORTS AND IMPORTS, AUSTRALIA

	Quantity			*Value f.o.b.*		
Year	*Sparkling ('000 litres)*	*Other ('000 litres)*	*Total ('000 litres)*	*Sparkling ($'000)*	*Other ($'000)*	*Total ($'000)*
			EXPORTS			
1970–71 . . .	395	6,169	6,564	391	3,188	3,579
1971–72 . . .	386	7,587	7,973	401	3,844	4,245
1972–73 . . .	547	4,110	4,657	550	2,670	3,220
1973–74 . . .	511	7,667	8,178	537	5,104	5,641
1974–75 . . .	392	6,154	6,546	476	4,867	5,343
			IMPORTS			
1970–71 . . .	536	1,850	2,386	780	1,801	2,581
1971–72 . . .	555	1,927	2,482	781	2,070	2,851
1972–73 . . .	672	2,237	2,909	1,002	2,523	3,525
1973–74 . . .	1,211	3,098	4,309	2,058	3,472	5,530
1974–75 . . .	1,286	4,009	5,295	1,747	4,728	6,475

During 1974–75 Italy supplied 1,958,000 litres valued at $1,989,000, Portugal 1,295,000 litres valued at $1,261,000 and the Federal Republic of Germany 996,000 litres valued at $1,431,000.

Exports of Australian-produced brandy in 1974–75 amounted to 217,000 litres alcohol, valued at $389,000. Imports of brandy, mainly from France, amounted to 701,000 litres alcohol, valued at $1,984,000.

Dried vine fruit industries

The dry period from November to March in the lower Murray valley makes this an ideal area for dried vine fruit. Harvesting for drying takes place at the end of summer. The sun-drying process is often accelerated by using a dip of cold potash.

In June 1963, Australian, Greek and Turkish dried vine fruit interests concluded an agreement to maintain minimum prices for sultanas on world markets. The agreement has been periodically reviewed. At the Ninth Conference in London in June 1971, representatives of the signatory countries (which had included South Africa from 1970) met for the last time as parties to the agreement and formally resolved it out of existence. Since the International Sultana Agreement was terminated in 1971 a Conference of Sultana (Raisin) Producing Countries has been held annually to maintain a high level of co-operation between the major producing countries.

DRIED VINE FRUIT: PRODUCTION

(Tonnes)

Year	*N.S.W.*		*Vic.*		*S.A.*		*W.A.*		*Aust.*	
	Raisins (a)	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*	*Raisins (a)*	*Currants*
1970–71	9,389	640	41,237	3,083	1,334	3,201	29	1,513	51,989	8,437
1971–72	15,182	583	71,521	3,244	8,551	3,098	37	1,232	95,291	8,153
1972–73	7,443	373	40,158	2,323	3,712	2,026	36	936	51,349	5,658
1973–74	8,016	287	33,645	1,255	2,109	1,041	31	1,032	43,801	3,615
1974–75	8,098	383	48,040	2,347	2,414	2,370	31	1,217	58,583	6,317

(*a*) Includes sultanas and lexias.

DRIED VINE FRUIT(*a*): EXPORTS, AUSTRALIA

Year	*Raisins, sultanas and lexias*		*Currants*		*Total*	
	Quantity	*Value f.o.b.*	*Quantity*	*Value f.o.b.*	*Quantity*	*Value f.o.b.*
	tonnes	$'000	tonnes	$'000	tonnes	$'000
1970–71	55,663	17,140	4,261	1,322	59,924	18,462
1971–72	51,678	16,120	4,590	1,378	56,268	17,498
1972–73	69,974	25,213	2,617	897	72,591	26,110
1973–74	27,020	17,172	1,399	698	28,419	17,870
1974–75	31,554	20,008	172	114	31,726	20,122

(*a*) Excludes quantities exported as mincemeat.

The chief countries importing Australian dried vine fruits are the United Kingdom, Canada, New Zealand and the Federal Republic of Germany. The quantities exported to these countries in 1974–75 were 6,034 tonnes, 9,895 tonnes, 4,234 tonnes and 3,362 tonnes respectively.

Table grapes

Grapes for table use are grown in all States except Tasmania, but the area of this type was only about 3 per cent of the productive area of vines in 1974–75.

LIVESTOCK AND LIVESTOCK PRODUCTS

Livestock numbers

A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given on page 748 of Year Book No. 35. Since 1861 annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia at decennial intervals from 1861 to 1971, and from 1973 onwards in single years, are given in the following table, and are shown continuously since 1880 on the graph on plate 52, page 793.

LIVESTOCK: AUSTRALIA, 1861 TO 1976
('000)

Year	*Horses*	*Cattle*	*Sheep*	*Pigs*	*Year*	*Horses*	*Cattle*	*Sheep*	*Pigs*
1861 .	432	3,958	20,135	351	1941 .	1,666	13,256	122,694	1,797
1871 .	717	4,276	41,594	543	1951 .	999	15,229	115,596	1,134
1881 .	1,069	7,527	62,184	816	1961 .	598	17,332	152,679	1,615
1891 .	1,522	10,300	97,881	891	1971 .	n.a.	24,373	177,792	2,590
1901 .	1,610	8,640	70,603	950	1973 .	n.a.	29,101	140,029	3,259
1911 .	2,166	11,745	98,066	1,026	1974 .	n.a.	30,839	145,175	2,505
1921 .	2,416	13,500	81,796	764	1975 .	n.a.	32,793	151,652	2,197
1931 .	1,793	11,721	110,568	1,072	1976p .	n.a.	33,434	148,643	2,173

While livestock numbers (particularly sheep) have increased substantially since 1861, marked fluctuations have taken place during the period, mainly on account of widespread droughts which have from time to time left their impressions on the pastoral history of Australia. These occurred in 1868, 1877, 1883–84, 1892, 1893, 1895, 1901–2, 1912, 1914, 1918, 1919, 1922–23,1925–26, 1927–28, 1929–30, 1940–41, 1944–45 to 1946–47, and 1965–67. The years in which the numbers of livestock attained their peaks are as follows: horses, 1919 (2,527,000); cattle, 1976 (33,434,000); sheep, 1970 (180,080,000); and pigs, 1973 (3,259,000).

The distribution throughout Australia of sheep, beef cattle, dairy cattle and pigs at 31 March 1963 is shown in the maps on pages 1049 and 1050 and facing pages 1082 and 1083 of Year Book No. 50.

Sheep

Distribution throughout Australia

With the exception of a short period in the early eighteen-sixties, when the flocks in Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising. Western Australia is the second largest sheep raising State followed by Victoria. Sheep numbers reached a peak in Australia in 1970. They then declined up to March 1973 as producers turned off large numbers for slaughter and moved from wool-growing towards beef production; by 1976, however, the numbers had increased to 148,642,000.

A map showing the distribution of sheep in Australia at 31 March 1963 appears on page 1049 of Year Book No. 50. Graphs showing the number of sheep in Australia from 1880 onwards appear on plates 52 and 53 of this Year Book (pages 793 and 795).

NUMBER OF SHEEP
('000)

At 31 March	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1972	62,000	29,496	14,604	17,970	34,405	4,237	7	192	162,910
1973	52,037	24,105	13,346	15,651	30,919	3,824	3	143	140,029
1974	53,296	25,787	13,119	16,431	32,451	3,964	1	126	145,175
1975	54,983	26,410	13,908	17,621	34,476	4,136	1	117	151,652
1976	53,200	25,395	13,599	17,279	34,771	4,249	1	148	148,643

The percentage distribution of sheep and lambs in the several States in 1976 was: New South Wales, 36; Victoria, 17; Queensland, 9; South Australia, 12; Western Australia, 23; and Tasmania, 3.

Movement in sheep numbers

SHEEP AND LAMBS: ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA
('000)

Year ended 31 March	*Numbers at beginning of season*	*Lambs marked*	*Net exports*	*Sheep and lambs slaughtered (a)*	*Estimated deaths on farms (b)*	*Numbers at close of season*
1972	177,792	51,705	807	52,198	13,582	162,910
1973	162,910	39,787	1,135	46,960	14,573	140,029
1974	140,029	42,962	1,060	26,541	10,215	145,175
1975	145,175	46,232	1,350	26,618	11,789	151,652
1976p	151,652	44,122	1,778	31,268	14,085	148,643

(*a*) Includes an estimate for numbers boiled down. (*b*) Balance figure; excludes lambs which died before marking.

Comparisons of Australian flock numbers with those of certain other principal sheep-producing countries are given on page 800.

Classification of sheep according to age, sex, and breed

SHEEP, BY AGE AND SEX: AUSTRALIA
('000)

Description	*31 March* 1972	1973	1974	1975	1976p
Rams (1 year and over)	2,060	1,844	1,820	1,895	1,870
Breeding ewes (1 year and over)	75,611	68,687	70,035	70,647	68,471
Other ewes (1 year and over)	9,089	6,688	5,807	7,035	7,692
Wethers (1 year and over)	39,777	34,660	34,592	37,055	37,534
Lambs and hoggets (under 1 year)	36,374	28,149	32,921	35,020	33,077
Total sheep and lambs	**162,910**	**140,029**	**145,175**	**151,652**	**148,643**

Particulars of the principal breeds of sheep at 31 March 1974 (details are collected on a triennial basis) are shown in the following table.

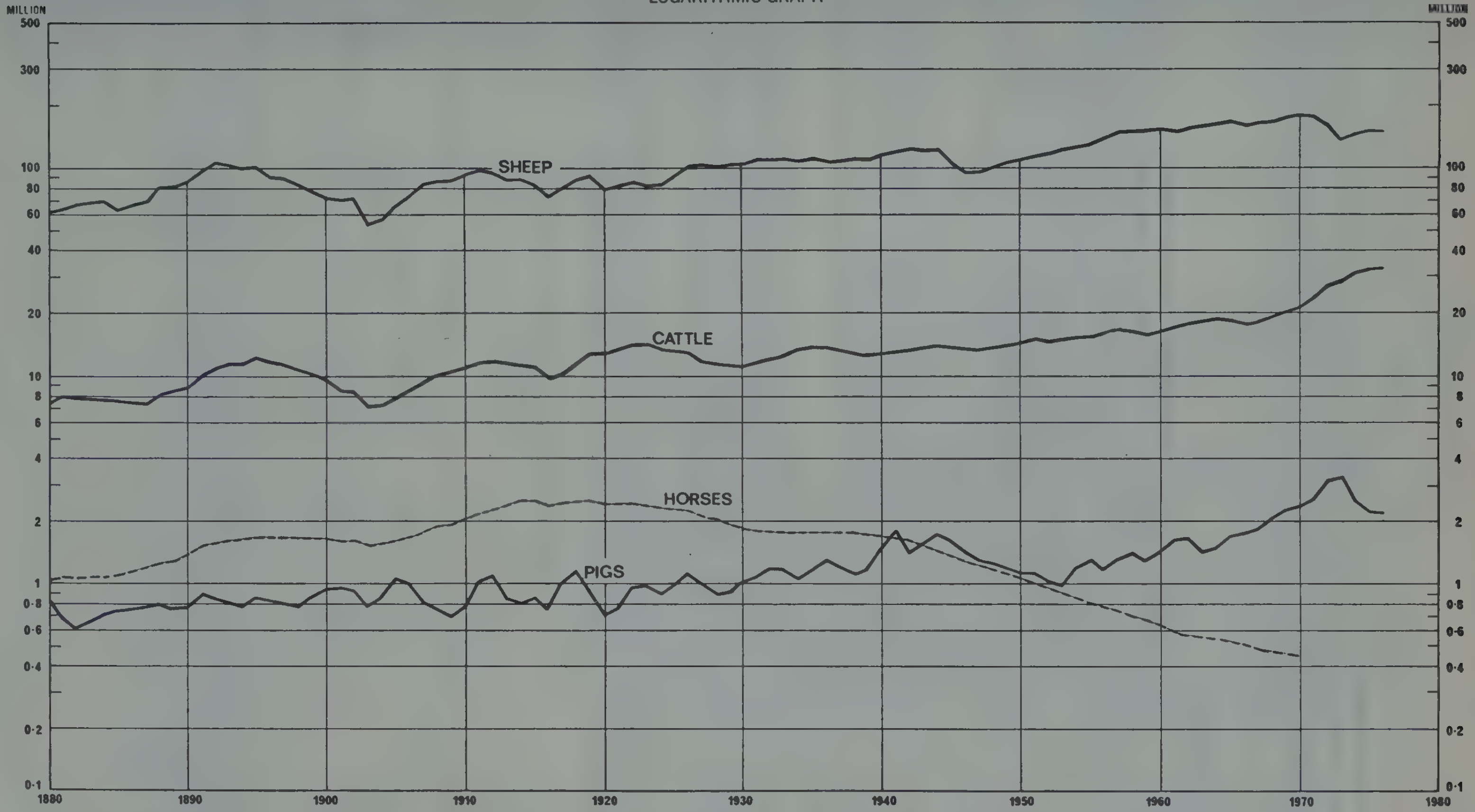
BREEDS OF SHEEP: 31 MARCH 1974
('000)

Breed	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Merino	39,765	12,256	12,898	14,212	30,337	424	1	105	109,997
Other recognised breeds	5,809	5,111	86	936	1,260	2,540	1	6	15,748
Merino comeback(*a*)	1,103	1,888	16	134	252	588	..	..	3,982
Crossbreds(*b*)	6,619	6,533	119	1,149	602	411	..	15	15,449
Total	**53,296**	**25,787**	**13,119**	**16,431**	**32,451**	**3,964**	**1**	**126**	**145,175**

(*a*) Merino comeback is the progeny of a crossbred Merino ewe and a Merino ram, i.e. finer than half-bred. (*b*) Half-bred and coarser.

LIVESTOCK: AUSTRALIA, 1880 TO 1976

LOGARITHMIC GRAPH



NOTE. VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY SCALE.

FIGURES FOR HORSES HAVE NOT BEEN COLLECTED SINCE 1970

PLATE 52

Wool

With about one-seventh of the world's woolled sheep, Australia produces about one-third of the world's wool and more than half the world's fine-quality Merino wool. More than 90 per cent of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonised wool, wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on page 800.

Wool production

Wool as shorn from the sheep contains an appreciable amount of grease, dirt and other extraneous matter, and is termed 'greasy wool'. The quantity of grease and other matter in a fleece differs not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep. To allow for this factor, the weight of greasy wool is sometimes given on a 'clean' basis, i.e. minus the estimated amount of impurities. The net wool fibre content of greasy wool, expressed as a percentage, is termed 'clean yield'.

From 1946–47 to 1952–53 the Australian Wool Realisation Commission, and from 1953–54, the Wool Statistical Service has assessed annually the clean yield of the Australian wool clip. During the period of assessment the clean yield showed a continuous rise up to 1951–52, when it reached 57.5 per cent. It was 59.93 per cent in 1974–75, the highest so far assessed.

Wool scoured, washed and carbonised in Australia before export, however, has a somewhat lower clean yield than the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonised contains quantities of dirty and low-grade wool. The quantity of scoured and carbonised wool exported during 1974–75 was about 8.4 per cent of total raw wool exports in terms of greasy. For the clean yield of Australian scoured wools exported a standard factor of 93 per cent has been adopted.

The production of wool in the States and Territories varies broadly in accordance with the number of sheep depastured and with seasonal conditions which affect clip per head (*see* page 795). In general, however, South Australia obtains from its large-framed merinos a much heavier fleece per sheep than the Australian average. In addition, as a result of better management (improved pastures, fodder conservation, better breeding, control of diseases, etc.), the long-term trend has been towards higher fleece weights.

The following table shows details of total wool (i.e. shorn, dead and fellmongered, and exported on skins) produced by each of the States and Territories during recent years. A graph showing the production of wool in relation to sheep numbers from 1880 onwards appears on plate 53, page 795.

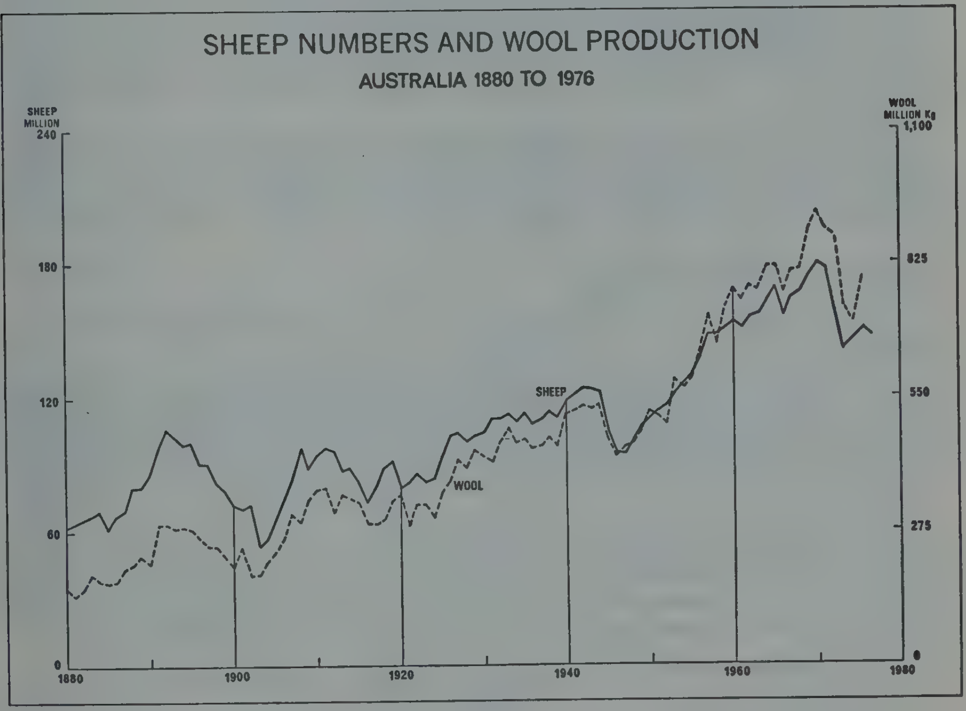
PRODUCTION OF WOOL (GREASY BASIS)
('000 kg)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71 . .	314,316	201,287	76,554	116,150	158,969	21,671	36	1,000	889,983
1971–72 . .	281,759	197,512	83,160	119,233	178,162	21,063	24	822	881,735
1972–73 . .	226,186	172,323	70,195	100,930	146,860	18,153	10	555	735,213
1973–74 . .	213,224	155,361	63,833	100,939	149,439	17,549	7	540	700,892
1974–75 . .	254,268	165,543	66,262	107,983	179,975	18,888	14	546	793,479

The bulk of the Australian wool production (about 90 per cent in recent years) is shorn from live sheep. The remainder is obtained by fellmongering (less than one per cent) or is exported on skins (about 9 per cent). The following table shows details of total wool production according to method of obtaining wool, and also the gross value of wool produced. Gross value is based, for shorn wool, upon the average price realised for greasy wool sold at auction and, for skin wools, on prices recorded by fellmongers and skin exporters.

QUANTITY (GREASY BASIS) AND VALUE OF WOOL PRODUCED: AUSTRALIA

Year	*Shorn (including crutchings)*	*Dead and fell-mongered*	*Exported on skins*	*Total production*	
				Quantity	*Value*
	'000 kg	'000 kg	'000 kg	'000 kg	$'000
1970–71	800,185	7,985	81,813	889,983	537,504
1971–72	778,566	8,437	94,732	881,735	660,456
1972–73	643,600	7,780	83,834	735,213	1,242,630
1973–74	644,257	3,987	52,648	700,892	1,229,296
1974–75	725,298	68,181		793,479	952,724


SHEEP NUMBERS AND WOOL PRODUCTION

AUSTRALIA 1880 TO 1976

PLATE 53

Average fleece weight

AVERAGE WEIGHT OF FLEECES SHORN (SHEEP AND LAMBS)
(kg)

State or Territory	*Sheep*					*Lambs*				
	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales	4.55	4.36	4.34	4.60	4.87	1.61	1.55	1.45	1.60	1.68
Victoria . .	4.67	4.52	4.45	4.92	4.87	1.39	1.36	1.24	1.38	1.50
Queensland . .	4.69	4.99	4.99	4.89	4.83	2.05	2.16	2.11	1.99	2.07
South Australia .	5.69	6.00	5.98	6.20	6.39	1.75	1.85	1.72	1.87	1.97
Western Australia	4.68	5.10	4.64	4.59	5.31	1.38	1.57	1.38	1.36	1.44
Tasmania . .	4.67	4.70	4.41	4.58	4.74	1.19	1.26	1.12	1.23	1.31
Northern Territory	4.29	6.00	3.86	4.75	4.75	..	..	..	..	..
Australian Capital Territory . .	4.26	4.13	4.07	4.64	4.70	0.95	1.22	1.02	1.09	1.70
Australia .	4.74	4.78	4.67	4.87	5.13	1.54	1.58	1.45	1.54	1.64

Wool marketing

Details of past wool marketing schemes and agreements, including the 1914–18 War Imperial Purchase Scheme, the British Australian Wool Realization Association Ltd, the 1939–45 War Acquisition Scheme, Joint Organization, and the Reserve Price Plans of 1951 and 1965, are given in previous issues of the Year Book.

Between 80 and 90 per cent of the Australian wool clip is disposed of at auction. (During both world wars, however, auction selling was suspended and replaced by bulk purchase schemes.) There are fourteen recognised wool-selling centres, namely Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Portland, Brisbane, Adelaide, Fremantle, Albany, Hobart, and Launceston. At these centres wool-selling brokers operate large stores where wool received from growers is held awaiting sale.

Each year a wool-selling program is drawn up by the Joint Wool Selling Organisation representing wool growers, wool buyers, the Australian Wool Corporation, selling brokers, and unions on the basis of expected clip. Selling dates and the quantities to be offered are then determined for each centre. Before each sale the selling brokers, who act as agents for the wool growers, display a representative portion of the wool to be sold on show floors for buyers' inspection and valuation. However, an increasing proportion of the clip is sold on the basis of laboratory-determined specifications ('objective measurements'). Auction sales are attended by buyers purchasing on behalf of wool users in more than fifty countries.

The balance of the clip is sold mainly through private sale, that is, after direct negotiation between the grower and the buyer. Since September 1971 a further alternative, sale by tender, has been available using the principle of sealed bidding. Companies engaged in this activity employ objective measurement techniques for wool, which can allow substantial savings in handling costs over traditional methods of wool selling by auction.

Wool marketing Committee of Enquiry

Details of this enquiry and its findings are included in previous issues of the Year Book.

Price and value

During 1974–75 the price of greasy and scoured wool sold in the selling centres of Australia averaged 127.03c per kg compared with the average price of 181.16c per kg in 1973–74. These prices are as compiled by the National Council of Wool Selling Brokers and represent the average price realised for all greasy and scoured wool, of whatever type or quality, marketed during the years indicated. The amount of scoured wool sold at auctions is now negligible.

Fluctuation in Australian wool prices has a marked effect on the nation's rural and national income. In 1945–46 the gross value of wool production was $117,194,000, representing 17.4 per cent of the gross value of production of all rural industries, while in 1950–51, when prices reached a peak, wool was valued at $1,303,804,000 or 55.6 per cent of the total value of production for all rural industries. The value of wool production fluctuated considerably in subsequent years. In 1974–75 it was $952,724,000 or 16.2 per cent of the gross value of production of rural industries.

ESTIMATED GROSS VALUE OF TOTAL WOOL PRODUCTION(*a*)

($'000)

Season	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71 .	198,688	118,123	44,916	65,525	94,510	14,983	17	742	537,504
1971–72 .	222,598	134,514	61,732	85,701	137,269	18,001	13	628	660,456
1972–73 .	429,825	254,434	123,512	164,577	231,559	37,481	17	1,224	1,242,629
1973–74 .	408,019	248,232	107,417	173,180	259,389	31,973	n.a.	1,086	1,229,296
1974–75 .	306,110	193,623	81,301	122,180	224,898	23,890	n.a.	722	952,724

(*a*) Includes shorn, dead and fellmongered wool and wool exported on skins.

Stocks of wool

Stocks of raw wool held in Australia at 30 June 1975 amounted to 447.6 million kg (greasy basis) of which 17.2 million kg (9.5 million kg as greasy and 7.7 million kg as scoured and carbonised) was held by woollen mills, wool scourers and fellmongers, and 190.9 million kg, assumed to be all greasy, was held by brokers and dealers and the Australian Wool Corporation. Of the wool held by brokers and dealers 28.5 million kg was unsold wool and 162.4 million kg was sold wool held awaiting shipment. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

Consumption of wool

Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonised wool used on the woollen and worsted systems (mill consumption), plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects, as they disregard overseas trade in semi-processed wool (e.g. tops and yarns) as well as woollen goods. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia are shown in the following table.

ESTIMATED CONSUMPTION OF RAW WOOL: AUSTRALIA
('000 kg)

	Greasy basis			*Clean equivalent*		
Year	*Used on woollen and worsted systems*	*Used for felt manufacture (including hats)*	*Total*	*Used on woollen and worsted systems*	*Used for felt manufacture (including hats)*	*Total*
1970–71 . . .	59,031	1,148	60,179	34,617	545	35,162
1971–72 . . .	54,108	1,148	55,256	30,965	545	31,510
1972–73 . . .	55,061	1,148	56,209	31,702	545	32,247
1973–74 . . .	44,490	1,148	45,638	25,461	545	26,006
1974–75 . . .	28,877	1,148	30,025	16,526	545	17,071

As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown above is over-stated to this extent. The series 'Estimated consumption of processed wool in Australia' provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown in the following table. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for overseas trade in woollen piece goods, clothing, etc., because of the obvious difficulties of estimating accurately the wool content of these products.

ESTIMATED CONSUMPTION OF PROCESSED WOOL: AUSTRALIA
('000 kg)

	Greasy basis				*Clean equivalent*			
Year ended 30 June	*Worsted yarn used (a) (b)*	*Woollen yarn used (b)*	*Scoured wool used for felt manufacture (including hats)*	*Total*	*Worsted yarn used (a) (b)*	*Woollen yarn used (b)*	*Scoured wool used for felt manufacture (including hats)*	*Total*
1971 .	19,735	18,030	1,148	38,913	12,210	10,913	545	23,668
1972 .	21,576	18,558	1,148	41,282	12,105	10,996	545	23,646
1973 .	18,894	18,736	1,148	38,778	10,627	10,493	545	21,665
1974 .	14,978	17,716	1,148	33,842	8,408	9,935	545	18,888
1975 .	9,411	13,779	1,148	24,338	5,283	7,804	545	13,632

(a) Includes hand knitting yarns used. (b) Includes wool content of yarns containing a mixture of wool and other fibres.

Quantities of wool exported

Of the total shipments of greasy and slipe wool in 1974–75, 30 per cent went to Japan, 13 per cent to the U.S.S.R., 12 per cent to France, 7 per cent to the Federal Republic of Germany, 6 per cent to Italy and 4 per cent to Poland.

EXPORTS OF GREASY AND SLIPE WOOL: AUSTRALIA

('000 kg actual weight)

Country of consignment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Belgium-Luxembourg	44,145	27,472	26,824	17,137	16,380
China—excluding Taiwan Province	2,439	6,478	8,812	8,198	1,124
—Taiwan Province only	14,226	15,692	15,691	5,718	6,201
France	62,343	78,346	57,343	50,176	56,502
Germany, Federal Republic of	46,118	52,036	41,022	22,840	32,050
India	16,916	15,223	6,868	10,075	11,781
Italy	42,451	52,327	43,278	32,121	29,405
Japan	254,684	285,239	299,163	175,266	138,544
Poland	12,711	18,355	22,555	16,945	17,912
United Kingdom	34,173	33,011	29,736	18,707	13,766
U.S.S.R.	38,795	21,328	30,264	59,828	60,876
Yugoslavia	16,655	8,671	19,665	21,480	12,347
Other	65,054	75,127	65,008	49,528	59,941
Total	**650,701**	**689,305**	**666,229**	**488,019**	**456,829**

EXPORTS OF SCOURED AND CARBONISED WOOL: AUSTRALIA

('000 kg actual weight)

Country of consignment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Canada	956	911	814	457	913
China—excluding Taiwan Province	103	231	590	1,015	277
—Taiwan Province only	2,182	1,063	1,523	1,312	490
France	1,061	1,622	691	684	1,427
Germany, Federal Republic of	3,800	3,619	3,624	2,867	4,968
Hong Kong	1,799	1,458	2,131	1,133	506
Iran	1,896	3,117	2,041	307	2,920
Italy	3,529	4,840	2,679	3,442	4,152
Japan	968	1,443	3,119	4,184	6,332
Korea, Republic of	729	759	1,679	1,058	1,303
United Kingdom	6,104	5,823	6,335	3,164	4,676
United States of America	2,550	1,020	2,967	2,186	1,935
U.S.S.R.	1,046	10,246	2,284	163	3,667
Other	6,069	5,891	3,797	5,099	4,712
Total	**32,791**	**42,043**	**34,274**	**27,071**	**38,278**

EXPORTS OF CARDED OR COMBED WOOL, NOILS AND WOOLWASTE: AUSTRALIA

('000 kg actual weight)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Carded or combed—Tops	8,892	9,949	9,070	5,842	4,870
Other	14	90	67	118	104
Noils	1,367	1,453	1,179	1,111	682
Waste	1,455	2,545	1,844	1,136	957

The following table shows the estimated greasy weights of exports of raw and semi-processed wool. As the figures in the table are expressed on a 'greasy' basis, they differ from those in the preceding tables which represent actual weight shipped.

EXPORTS OF WOOL—GREASY BASIS: AUSTRALIA

('000 kg)

	1970–71	1971–72	1972–73	1973–74	1974–75
Raw wool—					
Greasy and slipe	650,875	689,619	666,519	488,118	456,862
Scoured and carbonised	52,298	66,947	54,720	42,278	58,030
Exported on skins	81,813	94,732	83,834	52,648	66,225
Total raw wool	*784,986*	*851,298*	*805,073*	*583,044*	*581,117*
Semi-processed wool—					
Tops	17,073	18,903	17,208	10,859	9,253
Yarn	243	331	159	299	159
Total raw and semi-processed wool	**802,302**	**870,532**	**822,440**	**594,202**	**590,529**

Overseas trade in sheepskins

EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA

	Quantity ('000 kg)			*Value ($'000 f.o.b.)*		
Country of consignment	*1972–73*	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
France	75,473	47,597	52,586	69,103	61,381	40,652
Germany, Federal Republic of	5,886	3,452	3,849	4,425	2,971	3,409
Italy	16,486	7,682	6,540	15,686	10,825	5,884
Netherlands	2,620	1,275	1,162	1,189	1,057	955
Spain	2,649	1,217	863	1,852	1,552	629
United Kingdom	6,501	2,848	3,138	5,493	3,159	2,177
Yugoslavia	4,686	3,901	3,886	2,630	3,849	3,243
Other	8,615	6,635	4,464	6,112	6,593	4,132
Total	**122,916**	**74,607**	**76,488**	**106,490**	**91,390**	**61,081**
Number of skins ('000)	**39,931**	**24,387**	**24,077**	..	..	..

In 1974–75 a total of 721,000 sheepskins without wool were exported, valued at $1,149,000. Of these, sheepskins without wool to the value of $422,000 (37 per cent) were shipped to France, $194,000 (17 per cent), to Italy and $148,000 (13 per cent) to the United States of America.

Value of wool exported

The value of wool (other than wool on sheepskins) exported from Australia during 1974–75 was 9 per cent of the total value of exports of merchandise of Australian origin, while the proportion for the five years ended 1974–75 averaged 14 per cent. The values for the five years ended 1974–75, together with the principal countries to which wool was exported, are shown in the following table.

VALUE OF WOOL EXPORTS: AUSTRALIA(*a*)
($'000)

Country of consignment	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Belgium-Luxembourg	24,486	16,149	33,267	29,152	19,103
France	42,155	53,087	82,441	92,846	68,827
Germany, Federal Republic of	39,246	45,555	67,052	56,234	58,279
Italy	33,863	42,012	67,829	70,499	47,572
Japan	198,276	220,300	495,310	426,480	231,215
United Kingdom	30,062	32,470	55,869	43,064	24,619
United States of America	14,672	13,133	18,093	12,466	9,536
U.S.S.R.	35,349	29,860	70,269	147,271	98,485
Other	125,718	129,630	264,114	278,552	195,846
Total	**543,827**	**582,196**	**1,154,244**	**1,156,564**	**753,482**

(*a*) Excludes wool exported on sheepskins.

World sheep numbers and wool production

The following table shows particulars of the woolled sheep numbers and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of merino, crossbred, and carpet type wool for the latest available years.

In 1973–74 Australia produced 28 per cent of the world total of all types of wool. Other principal wool producers were New Zealand with 12 per cent of the world total, Argentina, 7 per cent, South Africa, 4 per cent, and United States of America, 3 per cent. Production in the U.S.S.R., China (excluding Taiwan Province) and eastern European countries together amounted to 22 per cent.

Australia's wool clip is predominantly merino. New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type.

ESTIMATED WORLD WOOLLED SHEEP NUMBERS AND PRODUCTION OF WOOL
(*Source* for countries other than Australia: Reports published by Australian Meat Board and by the Commonwealth Secretariat, London)

	Sheep numbers (million)			*Wool production (million kg—greasy basis)*		
Country	*1971–72*	*1972–73*	*1973–74(a)*	*1971–72*	*1972–73*	*1973–74(a)*
Australia	**163**	**140**	**145**	**882**	**735**	**701**
New Zealand	61	57	56	322	309	286
Argentina	40	41	42	189	177	180
South Africa	30	33	34	116	108	108
United States of America	19	18	16	82	78	72
Uruguay	16	17	17	54	60	60
United Kingdom	19	20	20	47	48	49
U.S.S.R.	140	139	142	429	420	433
Other	534	535	539	590	583	586
World total	**1,022**	**1,000**	**1,011**	**2,711**	**2,519**	**2,474**

(*a*) Provisional.

Mutton and lamb

Sheep slaughtered

SHEEP (INCLUDING LAMBS) SLAUGHTERED
('000)

	Slaughterings passed for human consumption									*Total slaughterings including boiled down*
Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
1971–72	16,641	20,084	3,418	5,144	6,001	1,475	4	218	52,983	53,444
1972–73	12,598	14,529	2,452	4,539	5,548	1,278	..	190	41,133	41,399
1973–74	7,709	8,392	1,321	2,595	3,756	825	..	145	24,743	24,886
1974–75	8,795	9,832	1,279	2,984	4,308	980	..	178	28,356	28,545
1975–76p	9,154	11,257	1,436	3,598	5,974	1,072	..	198	32,687	n.a.

Production of mutton and lamb

PRODUCTION OF MUTTON AND LAMB (CARCASS WEIGHT)
(Tonnes)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1971–72	289,557	380,447	58,896	91,504	105,117	27,188	65	3,554	956,328
1972–73	214,041	264,159	40,570	76,263	92,916	22,528	2	2,916	713,395
1973–74	142,182	157,600	23,206	50,116	66,154	14,768	. .	2,510	456,536
1974–75	161,733	184,018	22,581	54,818	76,018	17,492	2	3,157	519,819
1975–76p	165,746	204,349	24,901	64,344	102,572	18,905	4	3,351	584,172

Value of sheep slaughtered

GROSS VALUE OF SHEEP AND LAMBS SLAUGHTERED(*a*), 1974–75
($'000)

N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
58,835	56,064	537	22,212	34,177	6,359	(*b*)	82	178,266

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock. (*b*) Not available for publication; excluded from total.

GROSS VALUE OF SHEEP AND LAMBS SLAUGHTERED (*a*): AUSTRALIA
($'000)

1970–71	1971–72	1972–73	1973–74	1974–75
178,431	215,747	306,109	321,400	178,266

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock.

Consumption of mutton and lamb

In 1959–60 consumption of mutton and lamb, at 46.7 kg per head of population, exceeded that of beef and veal for the first time on record. Subsequently, it showed a continuous decline until 1965–66, when it fell to 37.6 kg per head. The 1974–75 figure was 26.6 kg per head or 37.8 kg per head less than beef and veal.

PRODUCTION AND DISPOSAL OF MUTTON AND LAMB
(CARCASS WEIGHT): AUSTRALIA

Year	Net change in stocks ('000 tonnes)	Production ('000 tonnes)	Exports(*a*) ('000 tonnes)	For canning ('000 tonnes)	Apparent consumption in Australia	
					Total ('000 tonnes)	Per head per year (kg)
			MUTTON			
1970–71	+5	470	201	14	250	19.7
1971–72	+3	596	317	14	263	20.4
1972–73	−7	435	238	11	193	14.8
1973–74	−6	221	107	11	109	8.2
1974–75	+3	250	121	11	115	8.6
			LAMB			
1970–71	+1	355	52	. .	302	23.8
1971–72	+2	360	43	. .	315	24.4
1972–73	−4	278	38	. .	244	18.7
1973–74	. .	235	25	. .	210	15.9
1974–75	+2	269	25	. .	243	18.0

(*a*) Includes carcass equivalent of boneless mutton exported.

Consumption of meat and meat products

The apparent consumption of meat (including cured and canned meat) and edible offal per head of population in Australia is shown in the table below.

MEAT (INCLUDING CURED AND CANNED) AND EDIBLE OFFAL AVAILABLE FOR CONSUMPTION: AUSTRALIA
(kg per head per year)

Year	*Beef and veal(a)*	*Mutton (a)*	*Lamb(a)*	*Pork(a)*	*Offal*	*Canned meat(b)*	*Bacon and ham(c)*	*Carcass equivalent of meat and meat products (d)*
1970–71 . . .	39.7	19.7	23.8	6.9	5.2	2.6	4.6	105.0
1971–72 . . .	39.5	20.4	24.4	6.9	5.8	2.6	5.0	106.8
1972–73 . . .	39.1	14.8	18.7	7.9	5.7	2.6	5.5	97.0
1973–74 . . .	40.7	8.2	15.9	6.8	4.4	2.4	5.5	86.6
1974–75 . . .	64.4	8.6	18.0	5.2	5.2	2.2	5.0	111.0

(*a*) Carcass weight. (*b*) Canned weight. (*c*) Cured carcass weight. (*d*) Includes offal.

Exports of mutton and lamb

EXPORTS OF FRESH, CHILLED OR FROZEN MUTTON AND LAMB(*a*): AUSTRALIA

	Mutton exports		*Lamb exports*		*Mutton and lamb exports*	
Year	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.
1970–71 . . .	130,910	52,192	43,623	21,878	174,533	74,070
1971–72 . . .	200,937	89,283	37,632	17,774	238,569	107,057
1972–73 . . .	156,737	100,562	31,657	17,920	188,394	118,482
1973–74 . . .	103,556	62,512	22,486	16,678	126,042	79,190
1974–75 . . .	120,738	48,856	24,623	15,508	145,361	64,364

(*a*) Actual weight shipped, not carcass equivalent.

In 1974–75 the principal buyers of Australian mutton and lamb were Japan (43,771,000 kg, valued at $24,980,000); Iran (13,297,000 kg, valued at $9,012,000); and the United Kingdom (10,195,000 kg, valued at $5,883,000).

Cattle

Objects of cattle-raising in Australia

Cattle-raising is carried out in all States, the main object in certain districts being the production of stock suitable for slaughtering purposes and in others the raising of profitable dairy herds. While dairy cattle are restricted mainly to coastal districts, beef cattle are more widely distributed in areas such as the tropical area of northern Queensland, the Northern Territory and the Kimberley district in the north of Western Australia. Increasing numbers of beef cattle are being raised in conjunction with sheep.

Distribution throughout Australia

Although cattle numbers declined after 1957 because of drought conditions and heavy slaughterings, they began to rise again in 1960 and in 1964 reached 19,055,000. Again because of drought in the eastern States, this figure declined to 17,936,000 in 1966. There has been a continuous increase in the total number of cattle in Australia since 1967.

For a graph showing the number of cattle in Australia from 1880 onwards *see* plate 52 page 793.

NUMBER OF CATTLE AT 31 MARCH
('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1972	7,410	5,457	9,022	1,495	1,975	829	1,166	20	27,373
1973	7,918	5,464	9,795	1,583	2,182	900	1,237	19	29,101
1974	8,456	5,840	10,297	1,692	2,330	884	1,321	19	30,839
1975	8,935	6,192	10,879	1,869	2,544	921	1,434	18	32,793
1976	9,138	5,868	11,347	1,891	2,654	909	1,603	23	33,434

Maps showing the distribution of beef and dairy cattle in Australia have been published in previous issues of the Year Book.

Classification of cattle

CATTLE CLASSIFIED ACCORDING TO PURPOSE, AGE AND SEX: 31 MARCH 1976p
('000)

Classification	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Bulls (1 year and over) used or intended for service—									
Dairy breeds	9	31	8	4	2	3	..	..	57
Beef breeds	142	86	196	35	53	13	39	..	564
Total	*151*	*117*	*204*	*39*	*55*	*16*	*39*	..	*621*
Proportion of Aust. total (per cent)	24.3	18.8	32.9	6.3	8.9	2.6	6.3	..	100.0
Cattle used or intended for production of—									
Milk or cream for sale—									
Cows in milk and dry	384	1,258	330	135	93	143	..	1	2,345
Heifers—									
1 year and over	109	300	81	34	36	36	1	..	595
Calves (under 1 year)	72	254	50	29	29	32	..	..	467
Milk or cream for use on rural holdings—									
House cows and heifers	54	19	32	7	6	3	..	..	122
Total	*620*	*1,831*	*493*	*204*	*164*	*214*	*1*	*1*	*3,528*
Proportion of Aust. total (per cent)	17.6	51.9	14.0	5.8	4.7	6.1	..	..	100.0
Cattle for other purposes (a)—									
Cows and heifers (1 year and over)	4,400	2,049	5,323	896	1,316	320	886	12	15,202
Calves (under 1 year) (b)	2,682	1,139	2,565	542	664	238	357	8	8,194
Other (1 year and over) i.e. steers, bullocks, spayed cows, etc.	1,285	733	2,762	210	455	121	320	2	5,888
Total	*8,368*	*3,920*	*10,650*	*1,648*	*2,435*	*679*	*1,563*	*21*	*29,285*
Proportion of Aust. total (per cent)	28.6	13.4	36.4	5.6	8.3	2.3	5.3	0.1	100.0
Total cattle and calves for all purposes	9,138	5,868	11,347	1,891	2,654	909	1,603	23	33,434
Proportion of Aust. total (per cent)	27.3	17.6	33.9	5.7	7.9	2.7	4.8	0.1	100.0

(*a*) Mainly for meat production. (*b*) Includes bull calves under 1 year.

CATTLE CLASSIFIED ACCORDING TO PURPOSE, AGE AND SEX: AUSTRALIA
('000)

	31 March				
Classification	*1972*	*1973*	*1974*	*1975*	*1976*
Bulls (1 year and over) used or intended for service—					
Dairy breeds	63	60	57	60	57
Beef breeds	462	489	516	562	564
Total	*525*	*549*	*574*	*622*	*621*
Cattle used or intended for production of—					
Milk or cream for sale—					
Cows (in milk and dry)	2,565	2,523	2,371	2,355	2,345
Heifers—					
1 year and over	660	655	633	634	595
Calves (under 1 year)	591	601	554	537	467
Milk or cream for use on rural holdings—					
House cows and heifers	128	124	121	122	122
Total	*3,945*	*3,902*	*3,679*	*3,649*	*3,528*
Cattle for other purposes(*a*)—					
Cows and heifers (1 year and over)	11,873	12,660	13,800	14,897	15,202
Calves (under 1 year) (*b*)	6,555	7,100	7,235	7,909	8,194
Other (1 year and over), i.e. steers, bullocks, spayed cows, etc.	4,475	4,889	5,551	5,716	5,888
Total	*22,903*	*24,650*	*26,586*	*28,522*	*29,285*
Total cattle and calves for all purposes	**27,373**	**29,101**	**30,839**	**32,793**	**33,434**

(*a*) Mainly for meat production. (*b*) Includes bull calves under 1 year

Exports and imports of cattle

In 1974–75 the number of cattle exported was 11,223, valued at $3,107,000 (1973–74, 24,754 valued at $7,680,000). Prior to June 1958 small numbers of cattle were imported consisting mainly of valuable animals for stud purposes. Since that date an embargo has been imposed on the import of cattle in order to prevent the introduction of the disease 'blue-tongue'.

Comparison with other countries

The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world at the latest available date.

CATTLE: NUMBERS IN VARIOUS COUNTRIES

(*Source* for countries other than Australia: F.A.O. *Production Yearbook*)

('000)

Country	*Year*	*Number*
India(*a*)	1974	179,900
United States of America	1974	189,966
U.S.S.R.	1974	106,266
Brazil(*b*)	1974	88,000
Argentina(*b*)	1974	58,000
Bangladesh	1974	26,698
China—excluding Taiwan Province(*a*)	1974	63,487
Pakistan(*a*)	1974	13,154
Australia	**1975**	**32,793**
Ethiopia(*a*)	1974	24,663
Mexico	1974	27,500
France	1974	22,864
Colombia	1974	23,032
Germany, Federal Republic of	1974	14,364
United Kingdom	1974	15,227
Turkey(*a*)	1974	12,408
South Africa, Republic of(*a*)	1974	10,600

(*a*) F.A.O. estimate. (*b*) Unofficial figure.

Cattle slaughtered

CATTLE (INCLUDING CALVES) SLAUGHTERED

('000)

Year	*Slaughterings passed for human consumption*									*Total slaughterings including boiled down*
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
1970–71	1,573	1,845	1,590	264	348	162	69	19	5,870	5,896
1971–72	1,717	2,074	1,708	291	389	185	77	20	6,461	6,514
1972–73	2,349	2,560	2,005	393	478	261	78	25	8,148	8,199
1973–74	1,925	2,260	1,740	359	487	259	67	24	7,120	7,145
1974–75	2,389	2,498	2,046	465	541	262	62	34	8,297	8,321

Production of beef and veal

PRODUCTION OF BEEF AND VEAL (CARCASS WEIGHT)

(Tonnes)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1970–71	282,370	307,520	302,185	43,494	64,336	29,877	14,317	3,179	1,047,278
1971–72	305,705	336,503	344,814	50,069	77,290	34,795	15,418	3,295	1,167,889
1972–73	416,418	416,463	384,088	64,254	90,052	47,471	15,178	4,021	1,437,945
1973–74	359,455	380,811	349,137	63,211	94,106	46,282	12,729	4,244	1,309,975
1974–75	442,343	402,549	431,184	84,650	106,117	48,313	13,174	5,434	1,533,764

Value of cattle and calves slaughtered

GROSS VALUE OF CATTLE AND CALVES SLAUGHTERED AND OTHER DISPOSALS(*a*), 1974-75
($'000)

N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
155,276	114,554	144,220	43,415	38,555	17,753	9,445	179	523,397

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock.

GROSS VALUE OF CATTLE AND CALVES SLAUGHTERED AND OTHER DISPOSALS(*a*), AUSTRALIA
($'000)

1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
642,337	717,598	1,021,703	1,069,123	523,397

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock.

Consumption of beef and veal

Consumption of beef and veal (including canned beef and veal) reached a peak of 60.2 kg per head in 1956–57. With the buoyant overseas market for beef and the high prices ruling in Australia during the following four years, consumption per head fell substantially, and in 1960–61 amounted to only 40.1 kg. In 1974–75 consumption per head reached a post war record level of 66.2 kg of which 64.4 kg was carcass meat and 1.8 kg was canned meat (in terms of carcass equivalent).

A table showing the consumption of all types of meat appears on page 802.

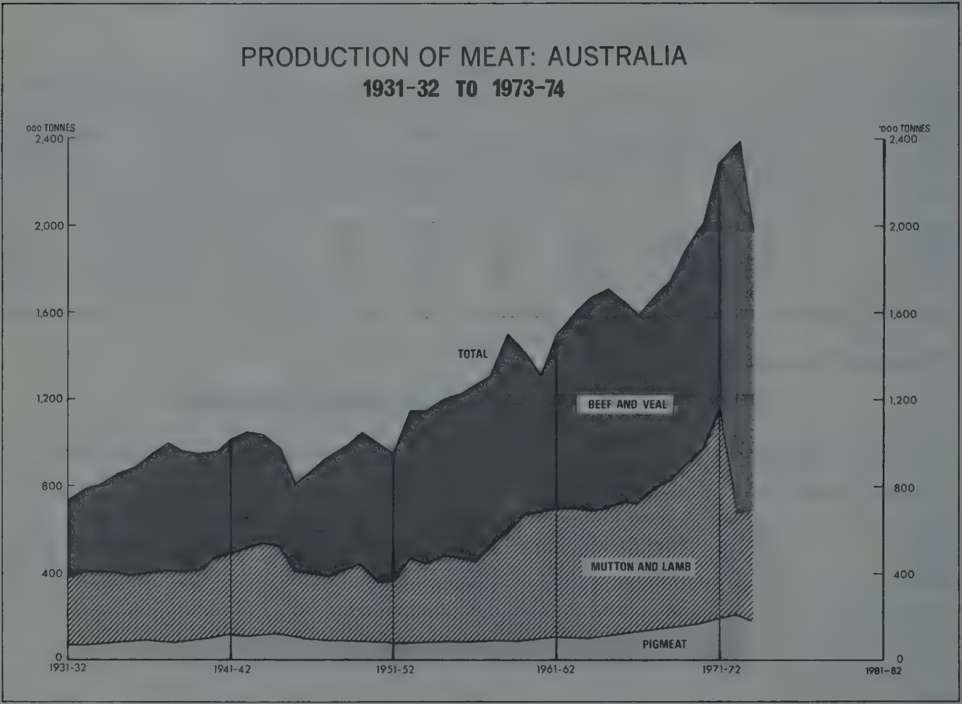

PRODUCTION OF MEAT: AUSTRALIA
1931-32 TO 1973-74

PLATE 54

PRODUCTION AND DISPOSAL OF BEEF AND VEAL (CARCASS WEIGHT) AUSTRALIA

Year	Net change in stocks	Production	Exports(a)	For canning	Apparent consumption in Australia	
					Total	Per head per year
	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	kg
1970–71 . . .	+ 2	1,047	499	45	502	39.7
1971–72 . . .	+11	1,168	594	55	508	39.5
1972–73 . . .	+ 4	1,438	872	50	512	39.1
1973–74 . . .	−19	1,310	733	55	540	40.7
1974–75 . . .	+11	1,534	611	44	868	64.4

(a) Includes carcass equivalent of boneless beef exported and all fresh and frozen meat shipped as ships' stores.

Exports of beef and veal

In 1974–75, the principal markets for Australian beef and veal exports were the United States (287,350,000 kg, valued at $215,444,000); Canada (27,790,000 kg, valued at $24,526,000); Japan (15,146,000 kg, valued at $14,571,000); and United Kingdom (16,332,000 kg, valued at $13,434,000).

EXPORTS OF FRESH, CHILLED OR FROZEN BEEF AND VEAL(a): AUSTRALIA

Year	Beef exports				Veal exports		Beef and veal exports	
	Bone-in		Boneless					
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.	'000 kg	$'000 f.o.b.
1970–71 . .	32,351	21,288	300,811	275,831	5,632	5,768	338,794	302,887
1971–72 . .	17,961	13,627	373,685	364,681	9,883	10,615	401,529	388,923
1972–73 . .	12,291	13,509	542,830	609,449	26,590	29,246	581,711	652,204
1973–74 . .	13,260	17,963	460,968	592,638	18,688	25,141	492,916	635,742
1974–75 . .	21,412	13,792	386,522	302,143	7,985	6,416	415,919	322,351

(a) Actual weight shipped, not carcass equivalent.

Exports and imports of cattle hides

The export trade in cattle hides and calfskins during 1974–75 was distributed among the main importing countries as follows; Japan, $8,477,000, Poland, $6,934,000, the Federal Republic of Germany, $5,366,000 and Italy, $3,627,000. The total quantity exported was 125,609,000 kg, valued at $39,771,000.

The quantity of cattle hides, including calfskins, imported into Australia during the year 1974–75 amounted to 333,000 kg, valued at $204,000. The chief source of supply was New Zealand.

The dairying industry

Australian dairy cattle have shown steady improvement in quality, as demonstrated by milk yield over the years. This is attributable to improved breeding, associated with herd recording, better feeding resulting from the use of improved pastures, and better farming methods arising from the development of modern farm machinery and the application of the results of research.

A significant development in recent years has been the shift away from on-farm separation and delivery of cream to factories, to a widespread system of refrigerated bulk milk delivery. The Commonwealth Government encouraged this transformation by providing interest-free loans under the Australian Dairy Adjustment Program.

The Australian dairying industry is conducted under conditions ranging from tropical to temperate and mediterranean type climates, and in general, is confined to the coastal and near coastal regions where rainfall and topography are favourable. These conditions are found in parts of the eastern, southern and south-western coasts. Inland districts include the lower north-east of Victoria, the south-western slopes of New South Wales, the fertile Darling Downs in Queensland, and the irrigated districts of the Riverina in New South Wales and northern Victoria.

The manufacturing and processing sections of the industry are well advanced technologically and certain techniques and equipment developed in Australia are now being adopted overseas. State Agricultural Departments give advice on approved methods of production and inspect animals, buildings and marketable produce, to ensure that the latest advances in technology are passed on to the farmer and that hygiene standards are maintained at a high level.

Cattle for milk production

DAIRY BREED BULLS, AND COWS AND HEIFERS USED OR INTENDED FOR PRODUCTION OF MILK OR CREAM, 31 MARCH 1972 TO 1976

('000)

		Cows and heifers used or intended for production of milk or cream for sale			
			Heifers		
At 31 March	*Bulls dairy breed(a)*	*Cows (in milk and dry)*	*One year and over*	*Under one year*	*House cows and heifers(b)*
1976—					
New South Wales	9	384	109	72	54
Victoria	31	1,258	300	254	19
Queensland	8	330	81	50	32
South Australia	4	135	34	29	7
Western Australia	2	93	36	29	6
Tasmania	3	143	36	32	3
Northern Territory	..	..	1	..	..
Australian Capital Territory	..	1	..	..	..
Australia	**57**	**2,345**	**595**	**467**	**122**
1975	60	2,355	634	537	122
1974	57	2,371	633	554	121
1973	60	2,523	655	601	124
1972	63	2,565	660	591	128

(a) Used or intended for service; excludes bull calves (under 1 year). (b) One year and over, kept primarily for rural holdings' own milk supply.

A map showing the distribution of dairy cattle in Australia at 31 March 1963 appears facing page 1082, Year Book No. 50.

Production of milk

In the following table particulars of the production of whole milk in the various States and Territories are shown. Victoria is the principal milk-producing State, and in 1974–75 the output from that State, 3,745 million litres, represented 58 per cent of total production. Output from New South Wales in 1974–75 was 958 million litres (15 per cent of the total) and that of Queensland 658 million litres (10 per cent). Production in the remaining States and Territories accounted for 17 per cent.

TOTAL PRODUCTION OF WHOLE MILK
('000 litres)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971–72	1,170,819	3,973,122	767,866	457,732	254,682	451,127	318	3,201	7,078,867
1972–73	1,176,962	3,944,600	736,790	424,265	242,060	423,841	318	2,672	6,951,509
1973–74	1,068,826	3,916,529	665,202	438,829	241,157	421,813	318	2,841	6,755,515
1974–75	958,254	3,744,632	658,243	426,371	245,895	460,521	318	2,559	6,496,795
1975–76p	979,948	3,516,234	703,066	397,500	241,103	435,186	318	2,658	6,276,013

Milking machines

Statistics relating to the number of milking machines on rural holdings at 31 March 1972 and 1973 are shown in the section Agricultural Machinery.

Value of whole milk production

GROSS VALUE OF WHOLE MILK PRODUCTION(*a*): 1974–75
($'000)

N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
114,232	267,337	57,178	31,498	20,458	29,358	167	625	520,853

(*a*) Includes subsidy.

GROSS VALUE OF WHOLE MILK PRODUCTION(*a*): AUSTRALIA
($'000)

1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
425,640	459,336	465,621	469,642	520,853

(*a*) Includes subsidy.

UTILISATION OF WHOLE MILK: 1974-75p

('000 litres)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Milk used for—									
Butter	261,837	2,435,763	206,502	88,967	99,630	248,075	..	..	3,340,774
Cheese	77,007	420,693	98,622	194,335	20,751	123,781	..	..	935,189
Processed milk products	66,819	415,585	(*a*)	..	5,452	(*a*)	..	..	568,338
Other purposes	552,591	472,591	(*a*)	143,070	115,864	(*a*)	318	2,559	1,644,617
Total	**958,254**	**3,744,632**	**654,564**	**426,371**	**241,697**	**460,521**	**318**	**2,559**	**6,488,917**

(*a*) Not available for publication.

In 1974–75, 51.5 per cent of the total milk supply was used for butter, 14.4 per cent for cheese, 8.8 per cent for processed milk products, and 25.3 per cent for other purposes.

PRODUCTION AND UTILISATION OF WHOLE MILK: AUSTRALIA

('000 litres)

		Quantity used for—			
Year	*Total production*	*Factory butter*	*Factory cheese*	*Processed milk products*(*a*)	*Other purposes*(*b*)
1970–71	7,248,995	4,212,524	746,240	586,814	1,703,417
1971–72	7,078,867	4,055,604	754,840	586,405	1,682,019
1972–73	6,951,509	3,817,112	871,027	536,858	1,726,513
1973–74	6,755,515	3,623,895	889,160	535,367	1,707,094
1974–75p	6,488,917	3,340,774	935,189	568,338	1,644,617

(*a*) Quantities of milk used to produce two or more products (for example, initially as full cream milk and subsequently as skim milk) are counted once only. (*b*) Principally fluid milk for domestic purposes. Includes milk used for farm production of butter and cheese.

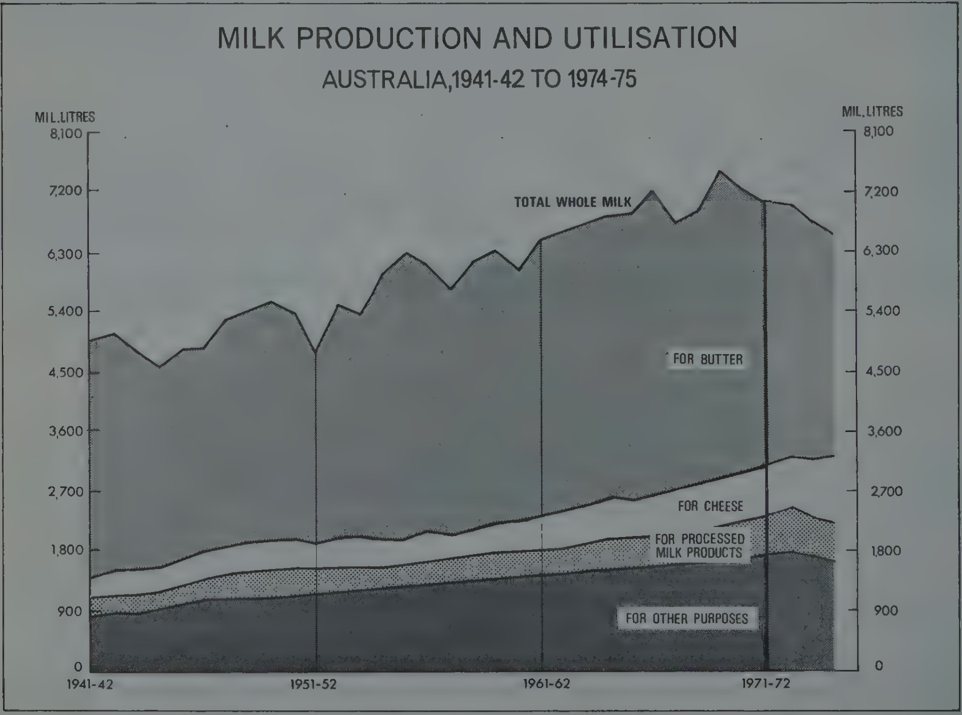


PLATE 55

Production of butter, cheese and processed milk products

Factory production of butter in 1974–75 was 161,274,000 kg. This was 61,684,000 kg (27.7 per cent) below the record of 222,958,000 kg attained in 1969–70.

BUTTER PRODUCTION IN FACTORIES
('000 kg)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1970–71	21,288	135,844	18,773	6,617	5,425	15,273	203,220
1971–72	19,325	129,897	18,022	6,196	5,937	16,029	195,406
1972–73	17,541	128,029	15,857	5,161	5,349	12,921	184,857
1973–74	13,287	127,730	11,699	5,160	5,223	12,398	175,497
1974–75	9,831	119,291	10,360	4,546	5,050	12,196	161,274

Factory production of cheese in 1974–75 reached a record level of 98,789,000 kg, which was 2,996,000 kg (3.1 per cent) more than the previous record of 1973–74.

NON-PROCESSED CHEESE PRODUCTION IN FACTORIES
('000 kg)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
1970–71	7,700	35,804	7,687	18,906	1,917	5,551	77,566
1971–72	7,486	38,788	8,251	18,444	1,979	5,923	80,871
1972–73	9,262	49,001	8,753	17,315	1,870	7,240	93,441
1973–74	9,365	47,903	9,225	18,904	1,922	8,475	95,793
1974–75	9,925	44,833	10,066	19,288	2,291	12,386	98,789

FACTORY PRODUCTION OF NON-PROCESSED CHEESE BY VARIETIES: AUSTRALIA
('000 kg)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Fetta	n.a.	567	496	544	538
Cheddar		58,415	69,977	69,374	68,692
Cottage		1,554	2,065	2,706	2,907
Soft					
Gouda		2,989	3,469	4,180	4,876
Other		17,346	17,438	18,989	21,776
Total cheese	**77,566**	**80,871**	**93,445**	**95,793**	**98,789**

Processed milk products are manufactured mainly in Victoria, which produced 73 per cent of the total (in terms of whole milk equivalent) in 1974–75. New South Wales accounted for 12 per cent and the remaining States for 15 per cent.

PRODUCTION OF PROCESSED MILK PRODUCTS: AUSTRALIA
('000 kg)

	1970–71	1971–72	1972–73	1973–74	1974–75
Condensed, concentrated and evaporated milk—					
Full cream—					
Sweetened(*a*)	16,696	16,705	14,301	12,724	14,428
Unsweetened	61,797	47,832	36,108	33,396	34,627
Skim	14,997	11,489	11,943	12,020	11,033
Infants', invalid and health beverages—					
Infants' milk powder	7,931	11,734	11,679	13,239	17,058
Other(*b*)	16,046	15,265	15,028	14,482	16,431
Casein	28,480	30,517	22,851	19,183	13,530
Powdered milk—					
Full cream—					
Spray	25,100	27,978	35,601	36,677	44,447
Roller	534	786	728	699	
Skim—					
Without added ingredients—					
Spray	74,768	75,065	98,734	121,739	138,857
Roller	5,884	7,253	6,503	5,540	8,303
With added ingredients—					
Baker's powder	3,024	2,478	2,300	2,501	1,893
Other	7,831	7,884	10,099	9,873	8,598
Buttermilk or mixed skim and buttermilk—					
Spray	9,216	6,138	9,559	11,604	7,587
Roller	7,959	8,390	6,452	5,669	3,957
Total powdered milk	*134,316*	*135,972*	*169,976*	*194,302*	*213,642*

(*a*) Includes 'coffee and milk'. (*b*) Includes malted milk and milk sugar (lactose).

Wholesale prices of butter and cheddar cheese in Australia

Details of wholesale prices operating in each of the States since March 1969 are shown in the following table. The prices included are those determined by the Australian Dairy Industry Council for choicest grade bulk butter and cheddar cheese up to May 1973. Since July 1974 the Council has accepted the recommendation of the Prices Justification Tribunal for increases in the domestic bulk wholesale prices of butter and cheese effective from the dates shown in the table below.

WHOLESALE PRICES OF BUTTER AND CHEDDAR CHEESE: AUSTRALIA
(cents per kg)

Date from which prices became effective	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*
Butter—						
31 March 1969	107.48	107.48	107.48	107.48	107.48	107.48
3 August 1971	111.88	111.88	111.88	111.88	111.88	111.88
7 August 1974	118.50	118.50	118.50	118.50	118.50	118.50
25 November 1974	125.11	125.11	125.11	125.11	125.11	125.11
27 May 1975	131.73	131.73	131.73	131.73	131.73	131.73
20 November 1975	142.75	142.75	142.75	142.75	142.75	142.75
Cheddar cheese—						
7 November 1966	65.04	65.04	65.04	65.04	65.04	65.04
10 November 1970	67.24	67.24	67.24	67.24	67.24	67.24
3 August 1971	69.45	69.45	69.45	69.45	69.45	69.45
8 November 1971	76.06	76.06	76.06	76.06	76.06	76.06
15 May 1972	82.67	82.67	82.67	82.67	82.67	82.67
7 May 1973	88.18	88.18	88.18	88.18	88.18	88.18
7 August 1974	92.59	92.59	92.59	92.59	92.59	92.59
25 November 1974	101.41	101.41	101.41	101.41	101.41	101.41
27 May 1975	104.06	104.06	104.06	104.06	104.06	104.06
20 November 1975	108.47	108.47	108.47	108.47	108.47	108.47

Local consumption of butter and cheese

Following the cessation of butter rationing after the 1939–45 War, consumption per head rose to 14.2 kg in 1951–52. However, in later years it gradually declined, and in 1974–75, at 7.3 kg per head, it reached its lowest level since the war. Consumption of cheese per head has risen steadily in recent years and by 1974–75 it attained a record figure of 5.2 kg per head.

PRODUCTION AND DISPOSAL OF BUTTER AND CHEESE: AUSTRALIA

Year	Change in stocks(a) ('000 kg)	Factory production ('000 kg)	Exports(b) ('000 kg)	*Apparent consumption in Australia as human food* Total ('000 kg)	Per head per year (kg)
		BUTTER			
1970–71	− 6,879	203,220	93,071	117,028	9.3
1971–72	+22,064	195,761	61,656	112,041	8.7
1972–73	− 3,100	184,857	78,957	109,000	8.3
1973–74	+11,226	175,497	60,083	104,189	7.9
1974–75	+27,547	161,274	35,247	98,480	7.3
		CHEESE			
1970–71	−12,516	77,566	38,382	51,700	4.1
1971–72	− 6,302	80,871	33,378	53,795	4.2
1972–73	+ 3,207	93,441	29,600	60,634	4.6
1973–74	− 5,506	95,793	38,055	63,244	4.8
1974–75	− 5,023	98,789	34,260	69,552	5.2

(*a*) Balance figure (includes imports). (*b*) Includes ships' stores; figures for butter include dry butter fat, ghee and tropical spread expressed as butter.

Average returns from butter and cheddar cheese sold

The table below shows rates realised on local, interstate and overseas sales and the average equalisation and subsidy rates in operation for the years ended June 1971 to 1976.

BUTTER AND CHEDDAR CHEESE: RATES REALISED ON SALES, AVERAGE EQUALISATION RATES AND RATES OF COMMONWEALTH SUBSIDY UNDER DAIRYING INDUSTRY ACTS

(*Source:* Commonwealth Dairy Produce Equalisation Committee Ltd)

(Cents per kg—product basis)

Year	*Rates realised on sales* Intrastate	Interstate	Manufacturing	Overseas	Average equalisation rate	Rate of bounty	Rate of overall return to manufacturer
Butter—							
1970–71	101.25	96.86	63.25	51.59	76.57	18.50	95.07
1971–72	104.72	100.63	65.41	60.57	83.83	17.61	101.44
1972–73	105.09	99.94	65.69	54.17	79.32	12.24	91.56
1973–74	(*a*)	(*a*)	(*a*)	(*a*)	(*b*)80.02	(*b*)8.47	(*b*)88.49
1974–75(*c*)	(*a*)	(*a*)	(*a*)	(*a*)	(*b*)88.80	(*b*)4.50	(*b*)93.30
1975–76(*c*)	(*a*)	(*a*)	(*a*)	(*a*)	(*b*)78.99	(*d*)	(*b*)78.99
Cheddar cheese—							
1970–71		63.80		36.44	52.40	8.35	60.75
1971–72		71.76		48.33	61.95	8.41	70.36
1972–73		79.83		46.30	67.18	5.83	73.01
1973–74		(*a*)		(*a*)	(*b*)71.85	4.06	(*b*)75.91
1974–75		(*a*)		(*a*)	(*b*)81.49	(*b*)2.15	(*b*)83.64
1975–76		(*a*)		(*a*)	(*b*)78.99	(*d*)	(*b*)78.99

(*a*) Not yet available. (*b*) Interim Rates. (*c*) Modified equalisation arrangements are operative from the 1974–75 season (in respect of disposals ex production); differing equalisation rates apply as between the States. (*d*) Bounty ceased 1974–75.

The distribution between factory and farm of the overall return to manufacturers for butter is shown in the following table.

COMMERCIAL BUTTER: AVERAGE OVERALL RETURNS AUSTRALIA

(*Source:* Commonwealth Dairy Produce Equalisation Committee Ltd)

(Cents per kg)

Year	*Rate of overall return to manufacturer*	*Estimated manufacturing cost*	*Return to dairy farmer*
1971–72	101.44	11.38	(*a*)90.07
1972–73	91.56	11.81	(*a*)79.75
1973–74	(*a*)88.49	(*a*)13.18	(*a*)75.31
1974–75	(*a*)93.30	(*a*)14.21	(*a*)79.09
1975–76	(*a*)88.50	(*a*)16.34	(*a*)72.16

(*a*) Interim rates.

Overseas trade in dairy products

The production of butter and cheese in Australia is considerably in excess of local requirements, and consequently a substantial surplus is available for export overseas. In normal circumstances the extent of this surplus is chiefly dependent upon seasonal conditions.

Exports of butter in 1974–75 amounted to 32.6 million kg, compared with 62.5 million kg in 1973–74. Exports of cheese in these years were 34.2 million kg and 43.7 million kg respectively. The principal importing country for Australian butter in 1974–75 was Canada, accounting for 34.9 per cent of total exports. In 1974–75 Japan was the principal importing country for Australian cheese with 53.7 per cent of total shipments.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to supervision, inspection and examination by officers appointed for that purpose. These commodities are graded according to quality, which has been fixed by regulation as follows: flavour and aroma, 50 points; texture, 30 points; and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality; at 90 to 92 points, first quality; butter at 88 to 89, cheese at 86 to 89 points, second quality; and butter at 83 to 85 points, pastry or cooking quality.

In the following table, particulars are given of the relative proportions of butter and cheese graded for export according to quality.

BULK BUTTER AND CHEESE GRADED FOR EXPORT: AUSTRALIA

Grade	*Quantity ('000 kg)* 1972–73	1973–74	1974–75	*Per cent* 1972–73	1973–74	1974–75
BUTTER(*a*)						
Choicest quality	48,986	37,144	27,574	93.1	94.7	86.4
First quality	2,897	1,769	3,561	5.5	4.5	11.2
Second and pastry quality(*b*)	723	309	771	1.4	0.8	2.4
Total	**52,606**	**39,222**	**31,905**	**100.0**	**100.0**	**100.0**
CHEESE						
Bulk cheddar—						
Choicest quality	10,682	17,057	14,940	30.9	59.7	64.7
First quality	7,439	7,513	3,737	21.5	26.4	16.2
Second quality(*b*)	683	660	152	2.0	2.3	0.7
Other bulk cheese	15,750	3,323	4,265	45.6	11.6	18.4
Total	**34,554**	**28,553**	**23,094**	**100.0**	**100.0**	**100.0**

(*a*) Includes unsalted. (*b*) Includes rejected.

NOTE—Bulk butter and cheese graded for export during one year is not necessarily exported during that year.

Exports of butter, cheese and other milk products of Australian origin are shown in the following table.

EXPORTS OF DAIRY PRODUCTS: AUSTRALIA

	Quantity ('000 kg)			*Value ($'000 f.o.b.)*		
	1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Butter(*a*)	57,828	37,867	18,941	47,966	27,199	19,508
Cheese(*b*)—						
Processed(*c*)	8,092	9,267	10,946	8,359	9,300	15,258
Other—						
Cheddar and epicure cheddar	17,627	22,846	17,386	10,597	15,554	14,298
Parmesan (incl. parmigiano and reggiono)	91	82	438	132	127	414
Other	3,759	5,835	5,460	2,601	3,956	4,666
Total cheese	*29,568*	*38,031*	*34,230*	*21,689*	*28,936*	*34,634*
Other milk products(*b*)—						
Preserved, condensed, concentrated, etc.—						
Sweetened	2,042	1,534	2,451	900	730	1,397
Unsweetened	2,588	2,166	3,471	978	838	1,448
Milk and cream baby foods, dried	8,435	8,235	8,879	5,996	6,139	7,455
Casein	15,013	20,480	6,119	10,882	16,118	6,439
Dried or powdered—						
Full cream	19,487	22,335	27,238	14,352	17,111	27,440
Skim	48,030	94,114	67,031	18,700	39,196	43,530

(*a*) Excludes butter concentrate, ghee and ships' stores. (*b*) Excludes ships' stores. (*c*) Includes pastes and spreads.

Buffaloes

Buffaloes were introduced into northern Australia, at Melville Island in 1825 and the Coburg Peninsula (Fort Wellington) in 1827 during attempts to establish settlements. In 1838 and later years shipments of buffaloes, mainly from Timor and the other Indonesian islands, were landed at Victoria Settlement. As buffaloes were ideally suited to the tropical region of the Northern Territory, they survived when the early settlements were abandoned, and multiplied rapidly in the coastal plains regions. It is estimated that there are now more than 200,000 buffaloes in the Northern Territory, predominantly along the coastal plains east of Darwin, although small groups have been known to wander further southwards.

Initially buffaloes were hunted for their hides. The demand for hides reached a peak in 1937 when about 17,000 buffaloes were slaughtered. Over the next 20 years the demand for hides declined considerably and there is no longer any demand for buffalo hide.

Commercial production of buffalo meat began in 1960 when a buffalo abattoir was established at Marrakai Creek, Northern Territory. The meat was used for pet food at first and in the following year slaughtering for human consumption commenced. During 1974–75 15,392 buffaloes were slaughtered for meat production valued at $593,216.

Although a domesticated animal in south-east Asia, the buffalo has reverted to its wild state in the Northern Territory. Attempts to domesticate the beast have largely been abandoned, with the annual agricultural census showing the number of domesticated buffaloes at: 7,843 in 1972; 5,189 in 1973; 4,418 in 1974 and 3,171 in 1975.

During 1974, for the first time, live buffaloes were exported overseas for breeding purposes. In 1974–75 120 were exported to Papua New Guinea, 406 to Venezuela, 128 to Brunei and 200 to Nigeria, a total of 854 beasts valued at $51,240. The 1975–76 year has seen the addition of Guyana to countries receiving live buffalo stock. Australia is currently the only supplier of buffalo breeding stock.

In 1975 Mudginberri Station commenced exporting buffalo meat to West Germany where it is sold as game meat. In 1976 Point Stuart was also granted an export licence and it too is providing meat for the German market.

The pig industry

In line with the general trend of increased specialisation common to most of the rural industries, pig farming has developed into a separate industry being no longer mainly associated with the dairy industry.

In 1971, a research scheme was established for the Australian pig industry. It is similar to those already operating for the benefit of other major rural industries such as wool, meat, wheat, dairy, tobacco, poultry and the dried fruit industries. Finance is provided from a levy of 5 cents per head on all pig slaughterings and this is matched, on a dollar for dollar basis from Commonwealth Government sources. Funds available for research are $514,839 for 1974–75.

The research program is administered by a Pig Industry Research Committee. This Committee, which is representative of the industry and research organisations, makes recommendations to the Minister for Primary Industry relating to the rate of levy and expenditure from the Pig Industry Research Trust Fund.

Distribution throughout Australia

At 31 March 1973 the number of pigs in Australia reached a record level of 3,259,397 which represented an increase of 60,714 (1.9 per cent) on the previous record at 31 March 1972 (3,198,683). The number of pigs has since declined to 2,172,762 at 31 March 1976.

NUMBER OF PIGS

At 31 March	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1972	1,059,331	589,992	534,502	478,874	427,061	103,934	4,862	127	3,198,683
1973	1,064,678	585,227	541,827	499,461	476,316	85,114	6,662	112	3,259,397
1974	834,678	424,248	441,463	385,158	343,623	68,379	7,826	43	2,505,418
1975	729,209	383,144	400,435	348,955	264,157	63,973	7,310	36	2,197,219
1976p	708,785	392,834	408,548	325,924	259,851	69,773	7,047	n.a.	2,172,762

A long-term comparison of pig numbers is given earlier in this chapter (*see* page 791). A map showing the distribution of pigs in Australia at 31 March 1963 faces page 1083, Year Book, No. 50 and a graph showing the number of pigs in Australia from 1880 onwards appears on plate 52 of this Year Book (*see* page 793).

Pigs slaughtered

PIGS SLAUGHTERED
('000)

Year	*Slaughterings passed for human consumption*									*Total slaughterings including boiled down*
	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*	
1971–72	1,094	1,051	794	436	367	165	4	17	3,928	3,942
1972–73	1,324	1,210	964	527	538	152	5	24	4,743	4,763
1973–74	1,166	1,081	829	448	497	116	9	24	4,170	4,187
1974–75	979	969	634	344	389	101	8	23	3,447	3,460
1975–76p	945	883	690	348	350	95	10	19	3,339	n.a.

Production of pigmeat, bacon and ham

PRODUCTION OF PIGMEAT (CARCASS WEIGHT)
(tonnes)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1971–72	49,722	51,506	41,151	23,095	19,963	8,267	130	644	194,478
1972–73	59,644	60,486	49,760	27,482	30,360	7,389	168	884	236,173
1973–74	54,161	54,336	43,333	24,195	28,269	5,477	345	920	211,036
1974–75	46,077	48,641	33,487	18,697	22,078	4,872	350	870	175,072
1975–76p	45,037	47,260	38,233	19,571	19,912	4,539	407	740	175,699

PRODUCTION OF BACON AND HAM (CURED CARCASS WEIGHT)

(tonnes)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust*
1970–71—							
(bone in)	10,877	4,479	5,616	1,115	1,678	915	24,681
(bone out)	4,973	8,788	5,620	3,506	3,124	545	26,556
1971–72—							
(bone in)	10,488	3,449	5,062	1,051	1,406	755	22,210
(bone out)	5,849	10,049	7,088	3,934	3,562	767	31,249
1972–73—							
(bone in)	11,611	3,176	6,548	1,252	1,446	746	24,779
(bone out)	6,622	11,598	7,950	3,828	3,765	729	34,492
1973–74—							
(bone in)	10,098	3,190	6,289	1,355	1,472	738	23,143
(bone out)	9,788	14,602	10,833	3,659	3,921	735	43,540
1974–75—							
(bone in)	6,135	2,880	5,189	1,075	1,535	824	17,638
(bone out)	10,388	15,805	6,864	3,280	3,882	842	41,060

Value of pigs slaughtered

GROSS VALUE OF PIGS SLAUGHTERED, 1974-75

($'000)

N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
58,022	42,511	30,941	23,435	16,936	5,625	268	3	177,741

GROSS VALUE OF PIGS SLAUGHTERED: AUSTRALIA

($'000)

1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
104,992	111,199	123,730	172,958	177,741

Consumption of pigmeat, bacon and ham

The apparent consumption of pigmeat decreased from 7.8 kg per head in 1973–74 to 5.2 kg in 1974–75. A table showing the consumption of all types of meat is shown on page 802.

PRODUCTION AND DISPOSAL OF PIGMEAT (CARCASS WEIGHT)

					Apparent consumption (as pork or smallgoods) in Australia	
Year	*Change in stocks(a)*	*Production*	*Exports*	*Curing and canning*	*Total*	*Per head per year*
	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	kg
1970–71	−0.9	181.7	1.7	93.3	87.6	6.9
1971–72	+1.7	194.5	3.8	100.1	88.8	6.9
1972–73	+1.8	236.2	20.1	111.0	103.2	7.9
1973–74	−2.4	211.0	8.6	100.8	103.9	7.8
1974–75	−0.2	175.1	1.1	104.0	70.1	5.2

(*a*) Includes allowance for imports.

PRODUCTION AND DISPOSAL OF BACON AND HAM (CURED CARCASS WEIGHT) AUSTRALIA

Year	*Change in stocks*	*Production*	*Exports*	*Canning*	*Apparent consumption in Australia*	
					Total	*Per head per year*
	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	kg
1970–71	..	67.2	0.3	8.2	58.7	4.6
1971–72	+0.1	72.3	0.3	8.0	63.9	5.0
1972–73	..	80.3	0.3	8.2	71.8	5.5
1973–74	+0.1	82.5	0.4	9.2	72.9	5.5
1974–75	+0.5	75.1	0.4	6.9	67.3	5.0

A table showing the consumption of all types of meat appears on page 802.

Exports of pigs and pig products

EXPORTS OF PIGS AND PIG PRODUCTS: AUSTRALIA

		Quantity			*Value ($'000 f.o.b.)*		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Bacon and ham (including canned)	'000 kg	401	549	583	575	813	1,047
Lard	'000 kg	14	485	92	6	150	32
Frozen pork	'000 kg	20,104	8,844	1,072	17,117	8,054	1,613
Pigs, live	number	1,219	1,068	497	59	78	39

The poultry industry

Once part of the mixed farming sector, the poultry industry is now a highly specialised and distinct industry. The bulk of production is obtained from this commercial source, though many farm households and some private homes in suburban areas keep poultry to supply their domestic needs and some supplies from this source are also marketed. Because the data from this latter sector is incomplete, total poultry numbers for Australia are not available. There is an increasing tendency for specialisation within the industry into hatcherymen, egg producers and broiler producers. These sectors of the industry each have separate statistics. There are also separate research schemes for the egg and meat chicken industries. Both sectors are good examples of the general movement towards specialised, large scale capital intensive production which is common to all rural industries.

Poultry numbers

POULTRY NUMBERS(a): AT 31 MARCH 1976
('000)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Hens and pullets for egg production	6,754	3,723	2,240	1,410	1,344	300	10	133	15,915
Meat strain chickens (broilers)	19,924	4,680	3,225	2,849	2,209	239	..	..	33,126
Other fowls and other chickens	640	344	357	126	64	34	..	..	1,566
Total	**27,319**	**8,747**	**5,823**	**4,385**	**3,617**	**574**	**10**	**133**	**50,608**
Ducks	185	28	5	18	15	2	..	..	254
Turkeys	294	19	2	12	5	1	..	..	333

(a) The table represents numbers of poultry on agricultural holdings as reported in the agricultural census.

Chicken hatchings and poultry slaughterings

Statistics shown in the following section have been compiled from returns supplied by commercial chicken hatcheries (i.e. those making sales of day-old chicks) and by commercial poultry slaughtering establishments. Poultry farmers hatching chicks solely for replenishing their own flocks, producers in the Northern Territory and the many very small producers are excluded from the collection. However, the statistics represent a high level of coverage in respect of commercial hatcheries and slaughtering establishments.

Poultry slaughtered for human consumption

No allowance has been made in the following figures for interstate movement of dressed poultry or changes in stocks held, and figures therefore do not necessarily represent the level of consumption in the States concerned.

Statistics for poultry slaughtered in Queensland are based on numbers slaughtered as collected by the Queensland Department of Primary Industries. New South Wales slaughtering statistics include poultry slaughterings by producers in the Australian Capital Territory.

NUMBERS OF POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION

('000)

Year	*Chickens(a)*	*Other fowls(b)*	*Ducks and drakes*	*Turkeys*
1974–75—				
New South Wales	59,176	3,639	(*c*)	(*c*)
Victoria	26,324	2,044	104	9
Queensland	17,764	1,554	(*c*)	(*c*)
South Australia	15,249	524	24	7
Western Australia	13,767	(*c*)	(*c*)	(*c*)
Tasmania	1,895	(*c*)	(*c*)	(*c*)
Australia	**134,175**	**8,600**	**1,283**	**1,891**
1973–74	139,765	7,894	1,195	2,216
1972–73	113,220	7,930	1,274	2,134
1971–72	113,296	8,803	1,375	1,353
1970–71	103,907	7,581	1,214	1,440

(*a*) Comprises broilers, fryers and roasters. (*b*) Comprises hens, roosters, etc. (*c*) Not available for publication.

DRESSED WEIGHT OF POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION(*a*)

('000 kg)

Year	*Chickens(b)*	*Other fowls(c)*	*Ducks and drakes*	*Turkeys*	*Total*
1974–75—					
New South Wales	74,518	5,816	(*e*)	(*e*)	89,380
Victoria	33,140	3,196	166	(*e*)	36,544
Queensland(*d*)	23,096	2,477	(*e*)	(*e*)	25,611
South Australia	16,773	834	51	31	17,689
Western Australia	16,121	(*e*)	(*e*)	(*e*)	17,714
Tasmania	2,340	(*e*)	(*e*)	(*e*)	2,503
Australia	**165,989**	**13,706**	**2,136**	**7,609**	**189,440**
1973–74	171,268	12,405	1,990	7,776	193,439
1972–73	138,320	12,510	2,174	7,769	160,773
1971–72	141,700	14,367	2,246	4,968	163,281
1970–71	131,046	12,383	2,068	6,020	151,518

(*a*) Dressed weight of whole birds, pieces and giblets. (*b*) Comprises dressed weight of broilers, fryers and roasters. (*c*) Comprises dressed weight of hens, roosters, etc. (*d*) Estimated. (*e*) Not available for publication.

Value of poultry slaughtered

GROSS VALUE OF POULTRY SLAUGHTERED(*a*): 1974-75
($'000)

N.S.W.(b)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
65,405	28,296	17,575	13,723	12,830	1,970	9	139,808

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock. (*b*) Includes A.C.T.

GROSS VALUE OF POULTRY SLAUGHTERED(*a*): AUSTRALIA
($'000)

1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
84,167	89,840	90,621	132,476	139,808

(*a*) Includes adjustment for net exports (overseas and interstate) of livestock.

Chicken hatchings in commercial hatcheries

Details contained in the following tables relate to all eggs set and to chicks hatched in commercial hatcheries whether for sale as day-old chicks or for replenishment of own flocks.

NUMBER OF EGGS SET(*a*) IN COMMERCIAL HATCHERIES
('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
MEAT STRAINS							
1971–72	73,707	35,097	21,647	13,253	(*b*)	(*b*)	161,645
1972–73	77,409	36,487	23,095	12,944	(*b*)	(*b*)	168,607
1973–74	95,578	41,902	26,275	17,529	(*b*)	(*b*)	202,790
1974–75	81,751	34,773	23,773	20,448	(*b*)	(*b*)	181,300
1975–76p	89,167	40,738	26,698	21,884	(*b*)	(*b*)	201,547
EGG STRAINS							
1971–72	18,238	14,251	10,755	4,933	3,606	977	52,759
1972–73	16,840	14,354	9,769	3,739	3,321	926	48,950
1973–74	14,406	17,657	9,155	4,842	3,858	1,173	51,091
1974–75	12,988	14,925	7,708	4,260	3,587	843	44,310
1975–76p	13,719	11,480	6,802	4,585	3,346	874	40,804

(*a*) Includes eggs which failed to hatch. (*b*) Not available for publication.

CHICKENS HATCHED(*a*) IN COMMERCIAL HATCHERIES

('000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.*
INTENDED FOR CHICKEN MEAT—MEAT STRAINS (Unsexed)							
1971–72	54,209	26,951	16,360	10,431	(*b*)	(*b*)	121,563
1972–73	56,246	27,746	17,418	10,131	(*b*)	(*b*)	125,822
1973–74	70,019	32,089	20,268	13,385	(*b*)	(*b*)	151,654
1974–75	62,026	27,306	18,928	16,089	(*b*)	(*b*)	140,139
1975–76p	68,222	33,219	20,925	17,789	(*b*)	(*b*)	158,084
INTENDED FOR CHICKEN MEAT—EGG STRAINS (Crossbred and other cockerels)(*c*)							
1971–72	517	431	507	117	49	50	1,670
1972–73	523	489	675	103	43	18	1,853
1973–74	472	351	633	95	38	12	1,602
1974–75	237	316	(*b*)	65	(*b*)	13	856
1975–76p	182	192	(*b*)	25	(*b*)	32	573
INTENDED FOR EGG PRODUCTION—EGG STRAINS (Pullets)(*c*)							
1971–72	5,889	4,861	3,484	1,876	1,268	302	17,680
1972–73	5,129	4,875	3,126	1,409	1,223	317	16,078
1973–74	4,757	6,028	3,154	1,769	1,359	426	17,492
1974–75	4,483	5,004	2,763	1,723	1,321	340	15,634
1975–76p	4,648	4,012	2,601	1,807	1,200	354	14,621

(*a*) Excludes chicks destroyed. (*b*) Not available for publication. (*c*) Includes a proportion of unsexed egg strain chicks.

Recorded production of eggs and egg products

Statistics of the production and disposal of eggs in Australia are recorded by the Australian Egg Board and the Egg Marketing Board of New South Wales. Details of production as recorded by these authorities are shown in the following table.

SHELL EGGS: PRODUCTION(*a*) RECORDED BY EGG BOARDS

('000 dozen)

State	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales(*b*)	89,663	91,100	87,782	83,315	81,221
Victoria	53,339	55,518	50,940	48,287	51,339
Queensland	25,305	25,031	26,985	28,365	30,699
South Australia	19,440	20,515	18,769	18,034	18,940
Western Australia	14,501	16,897	14,346	14,285	17,325
Tasmania	n.a.	n.a.	n.a.	n.a.	n.a.
Total(*c*)	**202,249**	**209,061**	**198,822**	**192,286**	**199,525**

(*a*) Receipts from consignors and sales by producer agents. (*b*) Includes Australian Capital Territory. (*c*) Excludes Tasmania.

Value of egg production

GROSS VALUE OF EGG PRODUCTION: 1974–75
($'000)

N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
68,644	44,331	24,535	14,043	12,032	4,903	853	2,400	171,741

GROSS VALUE OF EGG PRODUCTION: AUSTRALIA
($'000)

1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
111,155	110,874	117,359	147,788	171,741

Egg pulp production

Particulars of the production of egg pulp and powder as recorded by the Egg Marketing Board for the State of New South Wales and by the Australian Egg Board for the other States are shown in the following table.

EGG PULP AND POWDER: PRODUCTION RECORDED BY EGG BOARDS
('000 kg)

State	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
New South Wales	12,922	10,331	5,517	4,731	6,600
Victoria	8,334	9,122	2,475	3,379	4,670
Queensland	3,439	2,754	3,041	3,249	5,093
South Australia	3,691	4,176	2,021	2,406	3,317
Western Australia	1,353	2,442	1,085	711	1,732
Tasmania	n.a.	n.a.	n.a.	n.a.	n.a.
Total(*a*)	**29,738**	**28,825**	**14,139**	**14,476**	**21,412**

(*a*) Excludes Tasmania.

In addition to egg pulp and powder, production was also recorded for liquid egg whites and liquid egg yolks. Output in 1974–75 amounted to 5,849,000 kg and 4,522,000 kg respectively, compared with 5,922,000 kg and 4,492,000 kg respectively, in the previous year. These figures exclude small quantities produced in Tasmania for which details are not available.

Consumption of eggs and egg products

Because of the operation of producers outside the control of the Egg Boards and the extent of 'back-yard' poultry-keeping, for which no statistics are collected, figures relating to total egg production must be accepted with some reserve. The production shown in the following table, together with details of exports and consumption, is based upon the records of Egg Boards for production from areas under their control, plus estimates of production from uncontrolled areas and from 'back-yard' poultry-keepers.

ESTIMATED PRODUCTION AND DISPOSAL OF EGGS IN SHELL: AUSTRALIA

Year	Change in stocks	Estimated total production	Exports(a)	For drying and pulping(b)	Apparent consumption in Australia — Total	Apparent consumption in Australia — Per head per year
	mil. doz	mil. doz	mil. doz	mil. doz	mil. doz	doz
1969–70	..	271.4	5.1	53.6	212.6	17.1
1970–71	+0.2	287.0	5.1	64.8	216.9	17.1
1971–72	+0.4	296.1	6.9	67.9	220.9	17.1
1972–73	−0.1	283.9	6.5	52.8	224.6	17.2
1973–74	+0.7	277.8	3.1	46.2	227.8	17.2

(a) Includes ships' stores. (b) Includes wastage.

Details of the annual consumption of shell eggs, egg pulp and powder and total shell egg equivalent per head of population are shown in the following table.

SUPPLIES OF EGGS AND EGG PRODUCTS AVAILABLE FOR CONSUMPTION: AUSTRALIA

(Per head per year)

Year	Eggs in shell	Egg pulp and powder(a)	Total — Number	Total — Weight(b)
	number	number		kg
1969–70	206	14	220	12.5
1970–71	206	14	220	12.4
1971–72	206	12	218	12.3
1972–73	206	12	218	12.4
1973–74	206	13	219	12.4

(a) In terms of number of eggs in shell. (b) The average weight of an egg in Australia is taken as 56.7g.

Overseas trade in poultry products

Australian exports of shell eggs in 1974–75 amounted to 2,345,000 dozen compared with 2,203,000 dozen in 1973–74. The main outlets for Australian eggs in 1974–75 were Hong Kong (579,000 dozen), Kuwait (443,000 dozen), United Arab Emirates (543,000 dozen), and Papua New Guinea (294,000 dozen).

EXPORTS OF POULTRY PRODUCTS: AUSTRALIA

		Quantity			Value ($'000 f.o.b.)		
		1972–73	1973–74	1974–75	1972–73	1973–74	1974–75
Eggs in shell	'000 doz	5,552	2,203	2,345	1,470	872	951
Eggs not in shell—							
In liquid form	'000 kg	23,728	14,075	12,674	9,578	5,521	7,229
Dry	'000 kg	282	436	107	458	654	121
Frozen poultry	'000 kg	3,963	4,861	5,106	2,483	3,309	4,279
Poultry, live(a)	number	379,952	436,496	251,123	214	250	165

(a) Includes day-old chicks.

Imports of canned poultry in 1974–75 amounted to 254,000 kg, valued at $261,000, compared with 148,000 kg, valued at $129,000, in 1973–74.

Horses

The number of horses on rural holdings in Australia reached a peak of 2,527,000 in 1919. Since then it has declined, because of mechanisation of transport and farming, and the number recorded at 31 March 1970 was 456,000. From 1970 particulars of horses will be collected only at decennial intervals in accordance with the world census by FAO.

A graph showing the number of horses in Australia since 1880 appears on plate 52, page 793.

Horse numbers

NUMBER OF HORSES: 1930 TO 1970

('000)

31 March—	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1930 . .	535	393	500	189	160	34	34	1	1,846
1940 . .	535	326	445	190	139	30	33	1	1,699
1950 . .	342	200	317	83	59	21	33	1	1,057
1960 . .	204	81	234	30	41	11	38	1	640
1970 . .	136	53	173	16	29	6	41	1	456

Overseas trade in horses

Exports of Australian-bred horses in 1974–75 numbered 682, valued at $2,755,000, made up of horses for breeding (174 valued at $1,062,000), horses for racing (394 valued at $1,608,000, shipped principally to Singapore, Hong Kong, the United States of America and New Zealand) and horses for other purposes (114 valued at $85,000). Horses imported into Australia in 1974–75 (2,199 valued at $13,833,000) were mainly from New Zealand and the United Kingdom.

Miscellaneous livestock products

Tallow

Details of tallow consumption are collected from the principal factories using tallow. Recorded usage of inedible tallow in factories for the years 1971–72, 1972–73 and 1973–74 was as follows; for soap making: 1971–72, 35,770,000 kg; 1972–73, 42,185,000 kg; 1973–74, 35,371,000 kg; for products other than soap: 1971–72, 12,333,000 kg; 1972–73, 11,117,000 kg; 1973–74, 14,197,000 kg. Details of edible tallow usage in factories are not available.

Particulars of exports of edible and inedible tallow of Australian origin are shown in the following table for the five years 1970–71 to 1974–75.

TALLOW: EXPORTS, AUSTRALIA, 1970–71 TO 1974–75

(tonnes)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Edible . . .	17,727	17,011	17,329	10,729	19,783
Inedible . . .	139,151	199,675	179,942	136,783	137,114
Total . . .	**156,878**	**216,686**	**197,271**	**147,512**	**156,897**

Overseas trade in hides and skins

The value of cattle and horse hides, sheep and other skins, and skin pieces sent overseas during 1974–75 amounted to $104,182,000, compared with a total of $150,574,000 in 1973–74 and $192,098,000 in 1972–73.

Beekeeping

Production of honey and beeswax

Although practised as a separate industry, beekeeping is also carried on in conjunction with other branches of farming. A feature of the industry is that it consists mainly of apiarists operating on a large scale with mobile equipment. Some of these apiarists move as far afield as from Victoria to Queensland in an endeavour to provide a continuous supply of nectar from flora suitable for their bees. Production of honey in 1974–75 amounted to 20,618,000 kg (58.7 kg per productive hive) compared with 21,189,000 kg (51.8 kg per productive hive) in 1973–74. Beeswax produced in 1974–75 was 325,000 kg compared with 322,000 kg in the previous year.

Statistics in the following tables relate to the operations for 1974–75 of apiarists with forty or more hives. Information for earlier years covers the operations of apiarists with five or more hives except in New South Wales with six or more hives. It is estimated that for 1974–75 apiarists with less than forty hives accounted for less than 1% of honey produced, but comprised more than 50% of the total number of apiarists throughout Australia.

BEEKEEPING: AUSTRALIA

Season	Number of apiarists(a)	Beehives			Honey produced		Beeswax produced
		Productive	Unproductive	Total	Quantity	Average production per productive beehive	Quantity
		'000	'000	'000	'000 kg	kg	'000 kg
1974–75—							
New South Wales	812	142	52	194	7,790	55.0	126
Victoria	468	72	16	88	2,784	38.6	35
Queensland	275	37	21	58	1,480	40.0	24
South Australia	498	86	15	101	5,428	63.2	96
Western Australia	142	34	5	39	2,527	74.8	36
Tasmania	62	9	1	11	574	62.1	8
Australian Capital Territory	9	1	..	1	53	51.4	1
Australia	**2,266**	**381**	**110**	**491**	**20,636**	**54.2**	**326**
1970–71	5,759	376	118	493	19,126	50.9	266
1971–72	5,803	384	139	524	20,240	52.7	264
1972–73	5,926	395	133	528	18,083	45.7	261
1973–74	5,779	409	134	544	21,189	51.8	322

(*a*) *See* comments on coverage (in terms of bee-keepers included) above.

Value of honey and beeswax

GROSS VALUE OF HONEY AND BEESWAX 1974–75
($'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Total
Honey	3,587	1,493	735	2,094	935	423	37	9,304
Beeswax	220	45	41	129	65	14	1	515

GROSS VALUE OF HONEY AND BEESWAX: AUSTRALIA
($'000)

	1970–71	1971–72	1972–73	1973–74	1974–75
Honey	4,362	6,136	8,130	11,768	9,304
Beeswax	337	320	294	525	515

Overseas trade in honey and beeswax

EXPORTS OF HONEY: AUSTRALIA

(Australian produce only)

	Quantity ('000 kg)			*Value ($'000 f.o.b.)*		
Country of consignment	*1972–73*	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Belgium-Luxembourg	3	116	17	1	77	8
Denmark	187	55	134	97	36	69
Germany, Federal Republic of	317	140	732	197	93	398
Hong Kong	24	38	13	18	39	16
Indonesia	48	51	54	9	50	72
Japan	1,221	562	587	733	482	395
Kuwait	61	77	38	43	87	47
Malaysia	255	307	216	173	295	201
Netherlands	55	27	35	34	18	19
Saudi Arabia	67	91	146	46	106	195
Singapore	140	250	192	109	249	204
United Arab Emirates	14	31	41	15	34	46
United Kingdom	5,089	2,583	5,101	2,898	1,673	2,721
United States of America	190	76	1,952	88	37	1,051
Other countries	294	288	358	261	229	341
Total	**7,965**	**4,692**	**9,616**	**4,722**	**3,505**	**5,783**

Imports of honey amounted to 52,511 kg, valued at $46,014 in 1972–73, 40,421 kg, valued at $49,564 in 1973–74 and 38,486 kg, valued at $48,000 in 1974–75.

EXPORTS OF BEESWAX: AUSTRALIA

(Australian produce only)

	Quantity ('000 kg)			*Value ($'000 f.o.b.)*		
Country of consignment	*1972–73*	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
France	..	14	7	..	24	13
Germany, Federal Republic of	..	29	31	..	33	61
Japan	11	34	14	15	44	26
United Kingdom	25	131	144	30	212	262
United States of America	..	15	24	..	21	48
Other countries	5	11	23	11	22	49
Total	**41**	**234**	**243**	**56**	**356**	**459**

Imports of beeswax amounted to 6,621 kg, valued at $11,049 in 1972–73; 13,744 kg, valued at $24,777 in 1973–74 and 10,724 kg, valued at $28,000 in 1974–75.

Honey levy

A levy is imposed under the *Honey Levy Act* 1962 on domestic sales of honey, for the purpose of financing the operations of the Australian Honey Board. The current rate of levy which became effective on 1 October 1975 is 1.3 cents per kg; it can be increased by regulation to a maximum of 2.2 cents per kilogram.

In April 1974 an export charge of 0.3 cents per kg was introduced under the *Honey Export Charge Act* 1973 to provide necessary additional finance for the Honey Board to regulate Australian honey exports and undertake associated promotional and research activities. This levy may be increased by regulation to a maximum of 1 cent per kg.

Collections of the domestic sales levy have amounted to $128,000 and $162,000 in 1973–74 and 1974–75 respectively. Collections of the export levy amounted to $28,400 in 1974–75. The sum made available for research ($5,000 per annum in recent years) is matched by the Commonwealth Government with funds from the Special Research Grant.

RURAL IMPROVEMENTS, CONSERVATION AND CONSUMPTION OF FODDER

The soils of Australia

Year Book No. 52 contains an article (pages 873–9) on the soils of Australia which deals with the following matters: nature and development of Australian soils, including the agricultural development of soils, and types of Australian soils. A soil map of Australia and illustrations are included on plates 47 to 51 of Year Book No. 52.

Soil improvement and conservation

Fertilisers

The bulk of Australia's requirements of nitrogenous and phosphatic fertilisers is supplied by the domestic industry. Requirements of potassic fertilisers are primarily imported. Production of nitrogenous fertilisers is based on both Australian natural and refinery gas and imported naphtha feedstocks. Production of phosphatic fertilisers is dependent upon imported phosphate rock but with the development of domestic rock deposits, rock from these sources will be phased out of local manufacture.

As a result of widespread phosphate deficiency in Australian soils, phosphatic fertilisers account for a large proportion of usage both on crops and pastures. During 1973–74 usage of nitrogen, phosphorus and potassium in elemental terms was in the ratio of approximately 2:6:1.

Principal crops and pastures fertilised, etc.

Information regarding the principal crop and pasture areas treated with artificial fertilisers, and the quantity of artificial fertilisers (superphosphate, nitrates, etc.) used is given in the following tables.

PRINCIPAL CROPS AND PASTURES ARTIFICIALLY FERTILISED, AREA FERTILISED TYPE AND QUANTITY(*a*) USED, 1974-75

Crops and pastures		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Australia*
Sown and native pastures—										
Area fertilised	hectares	3,358,384	3,439,255	198,017	1,662,167	5,293,984	506,850	14,229	11,436	14,484,322
Type of fertiliser used—										
Superphosphate	tonnes	439,649	542,297	43,158	233,303	712,130	85,457	1,556	1,308	2,058,858
Nitrogenous	"	8,705	7,740	5,806	752	6,742	1,396	26	..	31,167
Other(*b*)	"	7,032	85,527	4,383	5,679	29,541	14,210	4	..	146,376
Lucerne—										
Area fertilised	hectares	93,105	48,182	8,701	(*c*)475,336	10,286	3,744	140	390	639,884
Type of fertiliser used—										
Superphosphate	tonnes	14,891	10,671	2,396	(*c*)80,954	1,796	823	29	54	111,614
Nitrogenous	"	20	187	401	(*c*)147	54	4	..	4	817
Other(*b*)	"	515	..	183	(*c*)1,919	526	500	..	..	3,643
Wheat—										
Area fertilised	hectares	1,460,800	970,081	56,316	1,120,334	2,748,569	1,493	..	204	6,357,797
Type of fertiliser used—										
Superphosphate	tonnes	96,867	114,595	2,117	144,627	308,121	357	..	24	666,708
Nitrogenous	"	6,051	1,947	2,537	1,901	75,722	1	..	..	88,159
Other(*b*)	"	6,747	1,291	159	5,264	3 262	10	..	..	16,733
Oats, barley and rye—										
Area fertilised	hectares	499,793	(*d*)344,680	83,937	(*e*)648,463	701,517	23,394	..	239	2,302,023
Type of fertiliser used—										
Superphosphate	tonnes	43,071	(*d*)43,412	5,636	(*e*)86,302	91,048	5,039	..	28	274,536
Nitrogenous	"	3,967	(*d*)653	4,855	(*e*)1,286	9,690	53	..	..	20,504
Other(*b*)	"	3,367	(*d*)727	903	(*e*)4,406	1,242	573	..	8	11,226
Other cereals—										
Area fertilised	hectares	91 921	3,260	100,163	167,274	4,290	23	8,615	..	375,546
Type of fertiliser used—										
Superphosphate	tonnes	3,898	536	4,360	22,290	353	6	3,105	..	34,548
Nitrogenous	"	11,873	50	8,645	172	667	..	988	..	22,395
Other(*b*)	"	2,141	87	1,359	841	108	4	5	..	4,545
Sugar cane—										
Area fertilised	hectares	11,767	..	236,602	..	..	..	..	..	248,369
Type of fertiliser used—										
Superphosphate	tonnes	639	..	20,514	..	..	..	..	..	21,153
Nitrogenous	"	5,345	..	118,517	..	..	..	..	..	123,862
Other(*b*)	"	1,147	..	83,564	..	..	..	..	..	84,711
Vegetables for human consumption—										
Area fertilised	hectares	17,094	21,094	16,001	7,583	5,597	10,054	104	48	77,575
Type of fertiliser used—										
Superphosphate	tonnes	6,071	7,707	1,942	4,089	2,890	3,016	30	3	25,748
Nitrogenous	"	2,445	1,952	3,845	1,702	5.105	177	11	11	15,248
Other(*b*)	"	9,085	13,337	7,589	4,342	3,804	6,526	47	47	44,777
Fruit—										
Area fertilised	hectares	20,730	14,450	13,601	11,509	5,603	3,346	31	7	69,277
Type of fertiliser used—										
Superphosphate	tonnes	4,464	3,541	1,687	4,629	2,206	631	8	1	17,167
Nitrogenous	"	4,065	4,202	5,988	3,021	2,617	363	8	..	20,264
Other(*b*)	"	12,063	3,712	9,077	2,804	1,447	2,079	3	2	31,187
Grapevines—										
Area fertilised	hectares	6,833	13,174	974	15,797	1,660	..	..	..	38,438
Type of fertiliser used—										
Superphosphate	tonnes	2,160	1,683	85	5,503	466	..	..	..	9,897
Nitrogenous	"	713	829	54	1,095	289	..	..	..	2,980
Other (*b*)	"	923	656	382	2,349	309	..	..	..	4,619
All other crops—										
Area fertilised	hectares	67,475	21,349	38,971	14,949	117,656	10,611	2	..	271,013
Type of fertiliser used—										
Superphosphate	tonnes	4,097	4,662	3,651	2,560	27,408	2,399	..	..	44,777
Nitrogenous	"	4,345	541	2,942	64	1,369	332	..	..	9,593
Other(*b*)	"	2,046	2,782	4,959	191	622	905	1	..	11,506
Total—										
Area fertilised	hectares	5,627,902	4,875,525	753,283	4,123,412	8,889,162	559,515	23,121	12,324	24,864,244
Type of fertiliser used—										
Superphosphate	tonnes	615,807	729,104	85,546	584,257	1,146,418	97,728	4.728	1,418	3,265,006
Nitrogenous	"	47,529	18,101	153,590	10,140	102,255	2,326	1,033	15	334,989
Other(*b*)	"	45,066	108,119	112,558	27,795	40,861	24,807	60	57	359,323

(*a*) Includes quantities of "double" and "triple" strength superphosphate converted to single strength equivalent. (*b*) Includes mixed and compounded fertilisers. (*c*) Includes Lucerne-based pastures. (*d*) Excludes rye which is included in "Other Cereals". (*e*) Excludes oats and rye which are included in "Other Cereals."

PRINCIPAL CROPS AND PASTURES ARTIFICIALLY FERTILISED, AREA FERTILISED TYPE AND QUANTITY USED, AUSTRALIA

Crops and pastures	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
AREA FERTILISED (Hectares)					
Sown and native pastures	14,938,139	13,296,223	15,256,254	17,994,410	14,484,322
Lucerne		482,475	496,955	494,949	639,884
Wheat	5,374,724	5,619,253	6,071,142	7,146,716	6,357,797
Oats, barley and rye	3,993,892	3,818,567	3,335,886	3,060,760	2,302,023
Other cereals		190,291	199,548	197,573	375,546
Sugar cane	228,404	234,301	239,672	235,843	248,369
Vegetables for human consumption	84,535	87,609	77,576	73,024	77,575
Fruit	125,170	82,493	79,750	74,828	69,277
Grapevines		35,966	35,551	35,726	38,438
All other crops	541,385	301,525	283,397	214,938	271,013
Total	**25,286,247**	**24,148,703**	**26,075,731**	**29,528,767**	**24,864,244**
SUPERPHOSPHATE USED (Tonnes)					
Sown and native pastures	2,158,413	1,895,616	2,233,071	2,708,648	2,058,858
Lucerne		77,079	79,887	89,142	111,614
Wheat	598,951	623,297	688,052	803,568	666,708
Oats, barley and rye	460,323	443,241	394,748	383,292	274,536
Other cereals		12,752	16,591	18,886	34,548
Sugar cane	22,477	18,544	19,830	20,642	21,153
Vegetables for human consumption	26,923	26,681	25,090	25,055	25,748
Fruit	27,200	17,781	18,012	18,904	17,167
Grapevines		8,950	9,061	10,242	9,897
All other crops	86,286	36,301	37,439	31,466	44,777
Total	**3,380,569**	**3,160,244**	**3,521,784**	**4,109,845**	**3,265,006**
NITROGENOUS FERTILISERS USED (Tonnes)					
Sown and native pastures	31,801	44,251	45,019	49,177	31,167
Lucerne		1,288	1,170	1,169	817
Wheat	31,153	30,021	32,382	72,754	88,159
Oats, barley and rye	33,435	19,018	16,943	23,426	20,504
Other cereals		19,126	19,561	47,694	22,395
Sugar cane	80,072	96,197	108,852	109,565	123,862
Vegetables for human consumption	11,335	13,624	11,879	21,907	15,248
Fruit	24,204	19,184	19,781	23,886	20,264
Grapevines		3,627	3,742	4,519	2,980
All other crops	9,622	12,493	10,573	12,851	9,593
Total	**221,622**	**258,829**	**269,902**	**366,946**	**334,989**
OTHER ARTIFICIAL FERTILISERS USED(*a*) (Tonnes)					
Sown and native pastures	131,719	151,039	176,467	168,258	146,375
Lucerne		4,418	4,215	5,562	3,643
Wheat	36,864	18,085	19,590	14,729	16,733
Oats, barley and rye	34,506	14,394	12,447	11,513	11,226
Other cereals		4,186	4,450	5,574	4,545
Sugar cane	68,898	69,985	75,127	75,589	84,711
Vegetables for human consumption	56,131	51,979	47,017	35,842	44,777
Fruit	48,782	34,985	35,488	28,655	31,187
Grapevines		4,515	5,074	4,442	4,619
All other crops	21,193	13,773	12,541	10,020	11,506
Total	**398,093**	**367,359**	**392,415**	**360,185**	**359,323**

(*a*) Includes mixed and compounded fertilisers.

Imports and exports of fertilisers

The chief sources of Australia's supplies of natural phosphate are Nauru, Christmas Island (Indian Ocean), Gilbert and Ellice Islands and Morocco. Sodium nitrate is obtained chiefly from Chile and the U.S.A.

IMPORTS OF FERTILISERS: AUSTRALIA

Description	*1970–71*		*1971–72*		*1972–73*		*1973–74*		*1974–75*	
	'000 kg	*$'000*	*'000 kg*	*$'000*	*'000 kg*	*$'000*	*'000 kg*	*$'000*	*'000 kg*	*$'000*
Fertilisers, crude—										
Natural sodium nitrate	3,242	185	3,159	212	3,572	225	3,921	286	3,135	494
Natural phosphates, whether or not ground	2,107,482	22,174	1,654,352	18,157	2,281,922	22,647	3,109,470	35,236	2,647,410	74,059
Natural potassic salts, crude	5,203	152	..	..	..	..	..	..	..	..
Fertilisers, manufactured—										
Mineral or chemical fertilisers, nitrogenous—										
Ammonium nitrate	14,648	954	2,695	164	9,185	458	3,987	255	6,480	967
Ammonium sulphate	453	20	375	13	144	7	111	11	43	8
Calcium ammonium nitrate	1,042	40	1,097	41	1,032	48	1,044	64	538	120
Sodium nitrate	2,101	110	1,035	66	805	116	198	17	35	3
Urea containing in the dry state more than 45% by weight of nitrogen	12,669	626	6,984	435	1,302	76	122	21	4,347	1,245
Other	948	58	564	32	757	47	1,073	87	844	111
Mineral or chemical fertilisers, phosphatic—										
Basic slag	..	..	..	..	..	..	..	..	..	..
Other (including superphosphates)	3,141	132	2,433	218	2,044	123	1,816	151	332	49
Mineral or chemical fertilisers, potassic—										
Potassium chloride	136,138	4,045	130,431	3,350	156,184	4,254	182,881	5,221	211,108	9,523
Potassium sulphate	17,131	748	15,482	768	9,101	438				
Other	2,468	66	891	54	128	8				
Fertilisers, n.e.s. In the form of tablets, lozenges and similar prepared forms or in packs of gross weight not exceeding 10 kg	39	54	49	53	29	30	214	109	170	137
Other—										
Sodium nitrate mixed or combined with potassium nitrate	234	15	118	9	100	9	31	7	18	3
N.P.K. complete fertilisers	7,439	443	14,850	985	5,491	439	4,258	430	3,801	647
Mixed or composite fertiliser	375	22	44	10	74	17	197	45	79	28
Blood and bone	..	..	..	..	..	..	..	..	..	..
Other	952	117	320	68	577	104	500	122	699	264

Exports of fertilisers (manufactured locally) amounted to 28,562 tonnes valued at $2,789,000 in 1974-75 compared with 39,407 tonnes valued at $1,929,000 in 1973–74.

Pasture improvement

An article on pasture improvement, which includes notes on indigenous and introduced species of grasses and traces the development of pasture research in Australia, appears on pages 1001–2 of Year Book No. 49.

Soil conservation

Year Book No. 49 contains an article (pages 1003–4) on soil conservation which deals with the following matters: land use and soil erosion, agents of erosion, prevention and control, and the activities of various Federal and State authorities which promote and co-ordinate research into the problems of soil erosion and the initiation of preventive measures.

Aerial Agriculture

Extensive use is made of aircraft for top-dressing and seeding, for spraying and dusting of crops and pastures, and for pest and vermin extermination.

For 1956–57 (the first year for which data are available) the total area treated was 593,000 hectares; in 1974–75 the total was 5,080,000 hectares. The following table shows details of area treated and materials used for each State for years ended 31 March.

AERIAL AGRICULTURE

Year ended 31 March	*Area topdressed and seeded*	*Area sprayed*	*Total area treated(a)*	*Materials used*		*Total flying time*
				Super-phosphate	*Seed*	
	'000 hectares	'000 hectares	'000 hectares	tonnes	tonnes	hours
1975—						
New South Wales(*b*)	2,172	512	2,754	261,658	4,595	41,167
Victoria(*c*)	649	132	814	112,824	5	18,327
Queensland	154	314	522	8,489	146	12,505
South Australia(*d*)	119	145	264	16,051	38	4,675
Western Australia	284	441	726	74,827	21	12,525
Australia	**3,378**	**1,544**	**5,080**	**473,849**	**4,805**	**89,199**
1971	3,304	1,124	4,581	417,366	1,111	83,692
1972	2,795	1,357	4,291	335,374	1,991	75,620
1973	3,359	1,355	4,788	446,190	1,646	89,432
1974	4,870	1,870	6,776	546,009	2,510	93,288

(*a*) Includes other types of treatment (rabbit baiting, etc.). (*b*) Includes the Australian Capital Territory. (*c*) Includes Tasmania. (*d*) includes the Northern Territory.

Irrigation on rural holdings

Details of the principal crops and the area under irrigation are given in Chapter 23, Water Resources.

Farm stocks of major cereal grains, silage and hay

FARM STOCKS OF CEREAL GRAINS

(Tonnes)

State	At 31 March— 1971	1972	1973	1974	1975
			BARLEY		
New South Wales	(a)	150,938	98,970	147,008	90,928
Victoria	62,994	91,669	86,999	91,788	62,534
Queensland	21,060	48,922	27,041	49,700	36,667
South Australia	133,017	189,501	156,444	147,737	135,244
Western Australia	102,056	144,528	189,226	163,617	108,247
Tasmania	10,004	10,447	10,758	9,315	8,590
Northern Territory	(b)	(a)	(a)	(a)	(a)
Australian Capital Territory	(b)	(a)	(a)	(a)	(a)
Australia	**n.a.**	**(c)636,005**	**(c)569,438**	**(c)609,165**	**(c)442,210**
			OATS		
New South Wales	611,889	415,855	260,918	360,598	392,123
Victoria	289,358	263,315	259,058	289,328	148,733
Queensland	13,516	14,653	9,592	11,020	21,646
South Australia	115,533	138,857	85,836	114,255	97,672
Western Australia	209,830	285,427	169,075	260,560	194,794
Tasmania	8,176	7,138	12,778	6,931	6,213
Northern Territory	(b)	(a)	(a)	(a)	(a)
Australian Capital Territory	565	411	262	586	285
Australia	**(c)1,248,867**	**(c)1,125,656**	**(c)797,519**	**(c)1,043,278**	**(c)861,466**
			WHEAT		
New South Wales	301,285	296,328	325,987	326,891	257,884
Victoria	137,537	169,455	157,904	148,748	122,664
Queensland	20,535	26,641	27,773	27,452	28,831
South Australia	105,288	105,489	122,119	120,799	109,373
Western Australia	279,158	214,055	199,481	221,541	209,086
Tasmania	2,563	2,534	4,413	3,214	2,344
Northern Territory	(b)	(a)	(a)	(a)	(a)
Australian Capital Territory	649	348	540	485	483
Australia	**(c)847,015**	**(c)814,850**	**(c)838,217**	**(c)849,130**	**(c)730,665**

(a) Not available for publication. (b) Not collected. (c) Incomplete; *see* footnotes to individual states.

FARM STOCKS OF SILAGE

(Tonnes)

State	At 31 March— 1971	1972	1973	1974	1975
New South Wales	860,565	745,997	590,043	769,127	775,097
Victoria	226,126	237,561	157,607	284,343	164,265
Queensland	129,622	187,159	173,979	168,017	142,146
South Australia	58,129	77,299	44,708	49,245	51,260
Western Australia	37,537	57,328	28,330	59,607	42,438
Tasmania	69,317	73,342	44,477	66,190	67,654
Northern Territory	(a)	589	469	842	275
Australian Capital Territory	50	737	203	1,350	6,630
Australia	**(b)1,381,346**	**1,380,012**	**1,039,816**	**1,398,721**	**1,249,765**

(a) Not collected. (b) Incomplete; excludes the Northern Territory.

FARM STOCKS OF HAY
(Tonnes)

State	At 31 March—				
	1971	*1972*	*1973*	*1974*	*1975*
New South Wales	2,561,303	1,782,023	1,192,843	1,662,779	1,556,490
Victoria	2,695,585	3,861,139	2,547,423	3,290,408	2,958,869
Queensland	287,762	338,670	294,848	280,609	263,869
South Australia	624,278	961,820	555,213	879,545	891,575
Western Australia	407,022	479,465	398,025	561,383	442,702
Tasmania	471,596	516,321	317,193	471,290	461,997
Northern Territory	(*a*)	945	521	2,488	909
Australian Capital Territory	9,805	14,350	2,885	8,727	5,280
Australia	**(*b*)7,057,351**	**7,954,733**	**5,308,951**	**7,157,229**	**6,581,691**

(*a*) Not collected. (*b*) Incomplete; excludes the Northern Territory.

On-farm consumption of major cereal grains and hay

CEREAL GRAINS CONSUMED BY LIVESTOCK ON FARMS
(Tonnes)

State	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
			BARLEY		
New South Wales	46,186	83,275	92,180	72,447	56,956
Victoria	40,837	57,230	84,196	68,999	43,069
Queensland	62,302	68,183	73,527	74,474	64,497
South Australia	78,002	126,956	148,578	125,311	109,227
Western Australia	62,484	66,473	126,656	126,272	71,251
Tasmania	9,678	12,267	13,594	6,457	6,237
Northern Territory	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Australian Capital Territory	(*a*)	(*a*)	62	64	(*b*)
Australia	**(*c*)299,489**	**(*c*)414,384**	**(*c*)538,793**	**(*c*)474,024**	**351,297**
			OATS		
New South Wales	131,025	192,623	253,697	107,834	84,924
Victoria	112,797	131,081	253,968	279,966	79,924
Queensland	9,587	6,730	9,591	8,732	8,484
South Australia	75,508	63,039	80,871	52,995	44,911
Western Australia	144,469	139,516	186,820	137,426	108,145
Tasmania	4,117	3,762	5,654	3,334	2,764
Northern Territory	(*a*)	7	(*b*)	32	(*b*)
Australian Capital Territory	152	504	232	319	292
Australia	**(*c*)477,655**	**537,262**	**(*c*)790,833**	**590,638**	**(*c*)329,444**
			WHEAT		
New South Wales	194,532	319,713	230,930	237,270	196,017
Victoria	64,661	70,969	209,135	61,485	50,385
Queensland	32,282	52,940	32,155	39,268	46,546
South Australia	39,409	55,345	73,915	43,011	40,222
Western Australia	73,642	78,803	72,980	58,496	35,660
Tasmania	10,466	11,919	13,987	16,694	14,276
Northern Territory	(*a*)	108	(*b*)	(*b*)	(*b*)
Australian Capital Territory	672	155	384	1,336	5,160
Australia	**(*c*)415,664**	**589,952**	**(*c*)633,486**	**(*c*)457,560**	**(*c*)388,266**

(*a*) Not collected separately. (*b*) Not available for publication. (*c*) Incomplete; *see* footnotes to individual States.

HAY CONSUMED BY LIVESTOCK ON FARMS

(Tonnes)

State	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
CEREAL HAY					
New South Wales	176,193	251,585	242,414	115,958	83,026
Victoria	284,661	378,997	396,186	244,116	174,362
Queensland	18,972	26,597	25,830	18,141	21,403
South Australia	217,929	222,076	234,755	155,892	129,469
Western Australia	251,627	229,665	241,573	213,602	169,374
Tasmania	21,422	19,662	25,427	13,710	23,292
Northern Territory	(*a*)	365	542	(*a*)	(*a*)
Australian Capital Territory	293	1,027	356	332	231
Australia	**(*b*)971,097**	**1,129,974**	**1,167,083**	**(*b*)761,751**	**601,157**
LUCERNE HAY					
New South Wales	408,512	561,260	558,448	316,230	264,843
Victoria	128,074	172,118	173,836	111,554	95,459
Queensland	164,919	172,208	184,626	136,059	130,781
South Australia	95,769	95,413	99,019	77,428	65,853
Western Australia	(*a*)	5,461	8,070	6,473	6,041
Tasmania	(*a*)	12,444	14,572	9,595	11,720
Northern Territory	1,212	4,015	562	5,376	1,928
Australian Capital Territory	3,130	3,433	3,256	1,296	1,124
Australia	**(*b*)801,616**	**1,026,352**	**1,042,389**	**664,011**	**577,749**
OTHER HAY					
New South Wales	306,764	445,767	307,709	225,194	246,596
Victoria	1,477,258	1,916,440	1,800,674	1,507,121	1,522,629
Queensland	146,631	59,733	58,261	48,995	46,277
South Australia	263,388	293,527	307,146	258,611	276,239
Western Australia	220,878	216,087	234,874	227,873	243,456
Tasmania	246,320	326,094	317,999	263,356	290,833
Northern Territory	3,596	2,225	2,323	7,788	1,494
Australian Capital Territory	843	1,373	497	388	882
Australia	**2,665,678**	**3,261,246**	**3,029,483**	**2,539,326**	**2,628,406**

(*a*) Included in 'other hay'. (*b*) Incomplete; *see* footnotes to individual States.

Agricultural machinery on rural holdings

The tables following show the principal types of agricultural machinery on rural holdings in the States and Territories at 31 March 1975. Additional information was published in the statistical bulletin *Rural Land Use, Improvements, Agricultural Machinery and Labour*, 1974–75 (10.59).

Farm machinery on rural holdings

AGRICULTURAL MACHINERY ON RURAL HOLDINGS: 31 MARCH 1975

(Number)

Machinery	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Tractors—									
Wheeled	82,232	78,322	66,223	35,524	32,681	11,560	451	131	307,124
Crawler	6,326	3,005	8,570	2,831	3,439	1,101	159	5	25,436
Fertiliser distributors and broadcasters(*a*)	23,887	26,681	18,036	10,021	10,099	5,518	105	56	94,403
Grain and seed harvesters (including headers and strippers)—									
Tractor drawn	12,637	9,761	3,635	8,350	7,520	510	26	10	42,449
Self-propelled	5,966	2,003	3,773	2,649	2,494	135	14	(*b*)	(*c*)17,034
Grain drills—									
Combine type	28,251	19,076	14,625	15,218	13,912	1,499	82	44	92,707
Other type	5,104	6,332	1,791	4,010	2,813	1,776	13	15	21,854
Pick-up balers	12,407	15,110	3,780	5,878	4,738	2,155	60	36	44,164
Forage harvesters	3,227	2,228	1,599	872	674	348	28	4	8,980
Rotary hoes and rotary tillers—									
Self-contained power unit . .	7,444	6,285	3,266	3,292	1,589	1,144	55	16	23,091
Tractor mounted and trailing types	9,571	6,066	8,088	3,154	2,236	1,159	55	16	30,345
Shearing plant (number of stands) .	59,858	34,144	15,052	24,580	25,244	3,916	. .	145	162,939

(*a*) Rotary and direct drop. (*b*) Not available for publication. (*c*) Excludes A.C.T.

AGRICULTURAL MACHINERY ON RURAL HOLDINGS: AUSTRALIA

(Number)

Machinery	*31 March*				
	1971	*1972*	*1973*	*1974*	*1975*
Tractors—					
Wheeled	300,844	305,628	307,271	308,714	307,124
Crawler	25,904	25,698	25,775	25,734	25,436
Fertiliser distributors and broadcasters(*a*)	98,117	96,832	96,140	96,388	94,403
Grain and seed harvesters (including headers and strippers)—					
Tractor drawn	49,904	48,477	46,107	44,440	42,449
Self-propelled	13,871	15,040	15,109	16,276	17,034
Grain drills—					
Combine type	93,567	95,779	95,743	94,881	92,707
Other type	26,078	24,959	24,066	23,161	21,854
Pick-up balers	42,187	42,942	43,399	44,565	44,164
Forage harvesters	8,479	8,960	9,044	9,237	8,980
Rotary hoes and rotary tillers—					
Self-contained power unit . .	23,059	24,884	25,553	25,073	23,091
Tractor mounted and trailing types	23,264	26,733	26,750	29,876	30,345
Milking plant (number of units) .	n.a.	209,805	211,888	n.a.	n.a.
Shearing plant (number of stands) .	n.a.	188,482	n.a.	n.a.	162,939

(*a*) Rotary and direct drop.

Sales of new tractors for agricultural purposes.

Details of the sales of new tractors for agricultural purposes are given in the quarterly publication *Receipts, Sales and Stocks of New Tractors* (12.18).

RURAL EMPLOYMENT

Employment on rural holdings

The following tables contain details of persons working on rural holdings at the end of March as recorded in the annual Agricultural Census.

Males working permanently full-time include all other than casual or seasonal workers, boys and youths attending schools and other persons working only part-time. Casual or seasonal workers, including contractors for shearing, etc., but not those engaged on construction and development work, are shown as temporary employees.

Attention should be drawn to the difficulty encountered in obtaining data on persons working on holdings on a comparable basis from year to year. This is mainly due to the changing number of lessees and sharefarmers, and the tendency of many farmers to include part-time family helpers as full-time workers in their returns.

Additional particulars relating to the number of males employed in agriculture up to 1941–42 are shown in Year Book No. 36, page 852, and previous issues. Similar details for later years are not available.

MALES WORKING ON RURAL HOLDINGS: 31 MARCH 1975

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Permanent—									
Owners, lessees or sharefarmers . . .	50,492	51,336	33,239	21,067	19,143	5,975	215	93	181,560
Relatives of owner, lessee or sharefarmer—									
Over 15 years of age, not receiving wages or salary . .	301	3,256	2,276	86	1,058	..	20	5	7,002
Employees, incl. managers and relatives working for wages or salary . .	17,784	10,236	12,156	5,479	5,885	2,310	1,124	62	55,036
Total permanent males	*68,577*	*64,828*	*47,671*	*26,632*	*26,086*	*8,285*	*1,359*	*160*	*243,598*
Temporary	18,429	20,628	11,941	6,919	(*a*)	3,674	372	98	(*a*)
Total males . .	87,006	85,456	59,612	33,551	(*a*)	11,959	1,731	258	(*a*)

(*a*) Not available for publication.

MALES WORKING ON RURAL HOLDINGS: AUSTRALIA

	31 March—				
	1971	*1972*	*1973*	*1974*	*1975*
Permanent—					
Owners, lessees or sharefarmers .	191,180	194,905	189,260	185,886	181,560
Relatives of owner, lessee or sharefarmer over 15 years of age, not receiving wages or salary . .	(*a*)8,062	8,797	7,782	7,316	7,002
Employees, incl. managers and relatives working for wages or salary	69,667	65,333	62,580	62,150	55,036
Total permanent males . .	*268,909*	*269,035*	*259,622*	*255,352*	*243,598*
Temporary	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)
Total males	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)

(*a*) Over 14 years of age. (*b*) Not available for publication.

Employment in the agricultural sector

In addition to the statistics of employment on rural holdings compiled from agricultural census data, agricultural industry employment statistics are also available from the quarterly labour force surveys conducted by the Bureau, and from the Australian population censuses which have been conducted on six occasions since 1947. Population census information is published in *Rural Land Use, Improvements, Agricultural Machinery and Labour*, 1974–75, (10.59).

In the labour force surveys, the agricultural labour force estimates form part of the civilian labour force estimates, which are based on the results of the quarterly population survey conducted by the Bureau throughout Australia in February, May, August and November each year. The survey is a multi-stage area sample of private and non-private dwellings and covers about two-thirds of one per cent of the population of Australia. The information is obtained by means of personal interviews undertaken by specially trained interviewers. Interviews are carried out during a period of four weeks, so that there are four survey weeks in each of the months to which the survey relates. These four survey weeks are chosen so as to fall within the limits of the calendar month or with minimum encroachment into the adjacent month.

A table showing an estimate of employment in agriculture from the labour force survey is shown on page 692–3. The table is based on the Australian Standard Industrial Classification (ASIC).

Under the *ASIC classification*, the term *agriculture* is used in the broad sense to include the breeding, keeping or cultivation of animal or vegetable life, the sun-drying of fruit and the agricultural service industries, such as those operating on a contract, consultant, etc., basis. However, the following activities which could be construed as falling within the ambit of agriculture, as specified in the previous sentence, are specifically excluded:

Forestry, pisciculture and the cultivation and production of aquatic vegetation, flora and fauna sanctuaries, botanical and zoological gardens, and institutional farms with research or penal functions.

Further information relating to the labour force surveys can be obtained from the quarterly Bureau publication *The Labour Force* (6.20).

ASSISTANCE TO, AND REGULATION OF, AGRICULTURE

This section is intended to provide a summary of the means by which the Australian agricultural industries are assisted and regulated. It is not intended to provide a comprehensive statement of all the consultative and legislative assistance and control measures that exist, but rather to describe the way in which these processes affect the crops, livestock and livestock products referred to earlier in this chapter.

General

The Australian Agricultural Council

The influence of government and semi-government authorities on Australian rural industry is most apparent in the fields of guaranteed prices, subsidies and controlled marketing. Many of these aspects of intervention at the national level take place indirectly through the Australian Agricultural Council. This is a permanent organisation which was formed following a conference of Federal and State Ministers on agricultural and marketing matters held at Canberra in December 1934. The Council consists of the Commonwealth Government Ministers for Primary Industry and the Northern Territory and the State Ministers of Agriculture/Primary Industries, with power to co-opt the services of other Commonwealth Government and State Ministers as required. The principal functions of the Council are: the promotion of the welfare and development of agricultural industries generally; the exchange of information on agricultural production and marketing; the improvement of the quality of agricultural products and the maintenance of high grade standards; to ensure, as far as possible, balance between production and available markets; and organised marketing.

A permanent Standing Committee on Agriculture was also formed to advise the Council on all the above matters and, in addition, to bring about co-operation and co-ordination in agricultural research, to advise Governments on the initiation and development of agricultural research programs, and to secure co-operation between all Governments in respect of quarantine measures against pests and diseases of plants and animals.

The Standing Committee on Agriculture comprises the permanent heads of the Commonwealth Department of Primary Industry and State Departments of Agriculture/Primary Industries and a representative each from the Commonwealth Departments of the Treasury, Health, Overseas Trade, the Northern Territory, and from the Commonwealth Scientific and Industrial Research Organization.

The Rural Reconstruction Scheme

The Rural Reconstruction Scheme commenced in 1971 when the Commonwealth Government agreed to make finance available to the States to help restore to economic viability those farms and farmers with the capacity to maintain viability once achieved.

Originally $100 million was to be made available to the States over a period of 4 years ending 30 June 1975. In addition the States were authorised to use $9.5 million from the pre-war Farm Debt Adjustments Scheme for rural reconstruction purposes. However, following a review of the Scheme in 1972 the Commonwealth Government undertook to provide the whole $100 million by 30 June 1973 and to provide an additional $18 million in 1973–74 to fund approvals given in the later months of 1972–73.

At the 1973 Review it was agreed to extend the Scheme for 3 years to 30 June 1976 with the Commonwealth Government authorising each State to approve a maximum amount of assistance in each year. A total of $36 million was allocated for 1973–74, $28 million for 1974–75 and $30 million for 1975–76. A Review in 1976 extended the Scheme to December 1976.

The Commonwealth Government provides the funds to the States on the basis of 75 per cent loan (repayable over 20 years) and 25 per cent grant. The States lend money to eligible farmers who repay their loans, with interest, over a period of years to the State. Each State Government has appointed an Authority responsible to a Minister, to undertake the detailed administration of the Scheme within its State.

Three forms of assistance are available.

Debt reconstruction to assist the farmer who, although having sound prospects of long term commercial viability, has used all his cash and credit resources and cannot meet his financial commitments.

Farm build-up to assist the normal processes under which properties which are too small to be economic are amalgamated with an adjoining holding or are subdivided and the subdivided portions are added to adjoining holdings, or to assist a farmer with a property too small to be economic to purchase additional land to build up his property to at least economic size.

Rehabilitation to provide limited assistance to those obliged to leave the industry where, in the opinion of the Authority administering the Scheme, this is necessary to alleviate conditions of personal hardship. The maximum rehabilitation loan at present is $3,000.

To 30 June 1975 over $189 million had been approved under the Scheme to provide assistance to 4,306 farmers for debt reconstruction, 2,576 for farm build-up and 182 farmers in need of rehabilitation assistance.

Agricultural research

Each State Department of Agriculture has a number of research stations investigating problems mainly of the regions in which they are located. In addition, a substantial amount of research and investigational work is carried out by these departments on farmers' properties. The work is supported by central laboratory and service facilities in capital cities and also by research analytical and diagnostic laboratories in the country areas. Research results are passed on to farmers through field days, meetings and publications, and through extension staff of the State Departments of Agriculture. In recent years, there has been increasing interest in economic interpretation of research results.

The Commonwealth Scientific and Industrial Research Organization carries out research at field stations and laboratory facilities in many parts of Australia, and also undertakes developmental studies at national level. Its research programs in the agricultural and livestock fields are generally designed to give information which is widely applicable in the Australian environment and which may require further regional interpretation and adaptation in order that it may be of use to the farming industries. Universities also carry out agricultural research at laboratory and field levels, in addition to their teaching functions.

For details of agricultural training *see* Chapter 19, Education.

Research schemes

The research activities of State departments, the C.S.I.R.O., universities and other institutions, are supplemented by funds provided under a series of joint Commonwealth Government-industry research schemes. Statutory arrangements of this nature exist for tobacco, wool, wheat, dairying, meat, poultry (eggs), chicken meat, pigs, dried fruits and fish. Contributions to these research schemes are raised from the industry by way of a levy on the produce concerned, matched by Commonwealth Government funds (*see* Chapter 18, Public Finance pages 597–8).

For research work in industries where legislation-backed arrangements do not exist, voluntary contributions from the rural industry are matched by the Commonwealth Government from a special research grant to finance a range of research projects, e.g. fruit fly disinfestation, locust control, honey, potato research and mohair production.

Extension services and market outlook information

Agricultural extension services are provided by the States through their Departments of Agriculture and in certain special fields by other State departments and authorities.Commonwealth extension services operate in the Northern Territory and the Australian Capital Territory.

All State Departments of Agriculture have university or agricultural college trained officers located in country areas. They carry out advisory and educational activities in the farming community, through contact with individual farmers, and through group and general publicity channels. In recent years States have strengthened the economic and farm management content of extension work.

Support for the field extension staff is provided by information service groups, by applied research teams and industry and subject matter specialist groups including economists, and by diagnostic and analytical services. Some States have advisory staff specialising in agricultural mechanisation. In recent years emphasis has been placed on the regional development of extension services.

Information services operated by Departments of Agriculture include agricultural journals, periodicals in various industry fields, pamphlets, newsletters, films, radio talks and television presentations. Group activities include discussion groups, field days, demonstrations, evening meetings and displays.

Since 1948 the Commonwealth Government has provided unmatched grants to the States to assist them in expanding their extension activities. In 1966, a program of rapid expansion of this assistance beyond the existing provision of $1.4 million per annum was undertaken with $21 million being made available during the subsequent five years through the Extension Services Grant. Provision for the five year period which began in 1971 amounted to $37 million. The Grant was renewed for the 1975–76 financial year amounting to $9.9 million. The Grant is disbursed mainly to State Departments of Agriculture, and its scope includes extension, regional research, information, economic services, agricultural education and training.

Since 1971 the Bureau of Agricultural Economics has organised a series of annual National Agricultural Outlook Conferences to which representatives from industry bodies, marketing authorities, State and Commonwealth Government departments, universities and other agricultural institutions are invited to analyse and discuss in depth the outlook for rural commodities.

Extension type services are available from non-government sources. Some commercial firms and co-operatives provide extension or advisory services primarily for their clients. Over the past decade a new service of farm management consultants has emerged, providing fee or contract services ranging from property assessment or supervision to detailed farm management and development plans. Farmers' needs and interests were demonstrated by an initial phase of grouping themselves together in farm management clubs to employ their own advisors.

Crops and crop products

Wheat marketing and research

Two of the aspects of government and semi-government assistance and control which have contributed to the development of the industry are the organisation of overseas marketing and of research.

As a large proportion of the Australian wheat crop is exported, the marketing of wheat plays an important part in the industry. The Australian Wheat Board was constituted in September 1939, under National Security (Wheat Acquisition) Regulations, to purchase, sell, or dispose of wheat or wheat products and to manage and control all matters connected with the handling, storage, protection, shipment, etc. of wheat acquired, and such other matters as were necessary to give effect to the regulations. Details of the operations of the Australian Wheat Board and the Wheat Stabilisation Board in licensing wheat grown during the seasons 1941–42 to 1948–49 will be found in Year Book No. 38, pages 940–1 and a detailed survey of legislation relating to stablisation of the wheat industry, including controls exercised during the 1914–18 and 1939–45 Wars and legislation establishing the Wheat Industry Stabilisation Plan in 1948, is given in the Appendix to Year Book No. 37, pages 1295–9.

The Wheat Industry Stabilisation Board ceased to function on 31 December 1948, and under the *Wheat Industry Stabilization Act* 1948 the Australian Wheat Board was reconstituted to administer the first stablisation plan and was given powers similar to those held under the National Security Regulations. The new Board commenced to function on 18 December 1948. The Board has been continued in existence by the *Wheat Industry Stabilization Acts* 1954, 1958, 1963–66 and 1968–73 for the purpose of administering the second, third, fourth and fifth five year stabilisation plans. Details of the more recent plans were published in Year Book No. 40, pages 841 and 842 (1947–48 to 1952–53 Plan), No. 44, page 861 (1953–54 to 1957–58), No. 48, pages 903 and 904 (1958–59 to 1962–63), No. 54, pages 868 and 869 (1963–64 to 1967–68), and No. 55, pages 834 and 835 (1968–69 to 1972–73).

The Fifth Wheat Industry Stabilisation Plan was to operate for five years, commencing with the 1968–69 crop and ending with the marketing of the 1972–73 crop. However, the plan was subsequently extended, for one year, to cover the 1973–74 crop. More detailed information is available in the publication: *The Wheat Industry*, 1973–74 *and* 1974–75 (*Preliminary*), (10.35).

Sixth Wheat Industry Stabilisation Plan, 1974–75 to 1979–80. The sixth post-war Wheat Industry Stabilisation Plan was agreed to by the industry and the Commonwealth and State Governments following negotiations during 1973 and 1974. The *Wheat Industry Stabilization Act* 1974 and the complementary *Wheat Export Charge Act* 1974 and the *Wheat Products Export Adjustment Act* 1974 were enacted in September 1974. Complementary legislation was enacted by the State Governments by the beginning of the marketing year on 1 December 1974 as some aspects of the plan rely on State law for their operation. The new plan abandoned the concept of guaranteed price, replacing it with a stabilised price related to movements in the International Wheat Market. Details of the guaranteed price operating under the former plan are given in earlier issues of the Year Book. The main features of the new stabilisation plan are set out below:

(i) *Period of the plan.* The plan is to operate for five years commencing 1 October, 1974. The Australian Wheat Board's marketing powers will be extended for two seasons beyond the duration of the stabilisation plan to enable continuity of the Board's operations to be maintained.

(ii) *Stabilisation price.* For the 1974–75 season the price was set at $73.49 per tonne f.o.b. The price will be adjusted for each of the next four succeeding seasons by application of the formula

$$SP_2 = SP_1 + \frac{EP_2 - A_1}{4}$$

where SP_2 = stabilisation price for the current season;

SP_1 = stabilisation price for the season immediately preceding the current season;

EP_2 = the average export price for the current season, and

A_1 = one-half the sum of the average export price for the season immediately preceding the current season and the stabilisation price for the immediately preceding season.

(iii) *Average export price.* The average price, f.o.b. equivalent, contracted to be paid for all exported wheat.

(iv) *Operation of the Stabilisation Fund.* The Stabilisation Fund will commence with a credit balance (estimated at $48 million) equal to the amount to be contributed as charge on wheat exports for the 1973–74 season.

Industry contributions to the Fund. When the average price for all exports of a season is above the stabilisation price set for that season, and above $55.12 per tonne f.o.b., growers will contribute to the fund up to $30 million or $5.51 per tonne, whichever is the lower, subject to the growers' contribution not exceeding an amount which would bring the final price, that is, the average export price less the contribution to the fund, down to $55.12 per tonne. If the aggregate of the growers' contributions plus the interest earning should at any time take the fund to a credit in excess of $80 million, the excess will be refunded to the Wheat Board for distribution to the earliest contributing pool.

Payment from the Fund. When the average price for all exports of a season is below the stabilisation price set for that season, growers will receive from the fund payments necessary to lift the average price for all exports of the season to the stabilisation price, subject to,

(a) maximum payment per season of $30 million or $5.51 per tonne, whichever is the lower, and

(b) the payment not exceeding an amount which will bring the final price, that is the average export price plus the payment from the fund, to $73.49 per tonne. A qualification is that should the credit of the fund reach $80 million this restriction on payments from the fund will not apply for the ensuring period of the plan.

Government support for the Fund. If, in any season, the fund contains an insufficient level of industry contributions to meet payments required to be made from the fund in that season, the Government will contribute to the fund for monies necessary to meet the deficiency, subject to

(a) Any Government contribution to the fund being repaid to the Government from industry contributions and subsequent seasons of the plan period before those industry contributions are accumulated in the fund, and

(b) the net Government contribution to the fund over the 5 seasons not exceeding $80 million.

The Government has agreed that any outstanding Government contributions not recouped by the end of the fifth season will be written off. Details of the former stabilisation fund arrangements are given in previous issues of the Year Book.

(v) *Home consumption price.* The home consumption price arrangements will continue on the existing basis except that the Act in authorising the Minister to determine, in consultation with the State Ministers, the price at which the basic wheat is to be sold by the Board on the domestic market, does so on the basis that it will be a single price for wheat for all purposes.

The home consumption price in each year commencing on 1 December will be adjusted on the base level of $70.41 per tonne, being the 1973–74 price (less the Tasmanian freight loading), according to movements in cash costs and in rail freight and handling charges. Amending legislation passed in April 1976 provided for the inclusion of an owner/operator's labour allowance in the index adjustment of the home consumption price.

(vi) *Tasmanian freight loading.* Continuing provision will be made for the Board to recoup in the the home consumption price the cost of shipping wheat from the mainland to Tasmania but on the basis that the Board will be empowered to take such steps as are practicable to recoup from Tasmanian interests the freight costs of the wheat equivalent of any products made from wheat of mainland origin and exported from Tasmania to the mainland.

(vii) *Nomenclature.* The term 'fair average quality' (f.a.q.) has been replaced by the term 'Australian standard white' (A.S.W.) which means wheat other than wheat classified by or on behalf of the Australian Wheat Board as prime hard, hard, durum or soft biscuit wheat or as having a defect quality.

(viii) *Quota arrangements.* The Act contains provisions for the retention of the wheat delivery quota mechanism on the basis that it will be optional whether State governments make allocations of any State quotas, which may be applied in a season, to individual growers. However, the Act continues the existing requirement that in a quota season advances will only be payable by the Board on wheat delivered within a State up to the level of the quota determined for that State.

(ix) *Borrowings by the Board.* The Board retains the authority to borrow from the Reserve Bank, through its Rural Credits Department, the funds required for first advance payments to growers and for its marketing operations. In addition it is being given a supplementary borrowing power which could be used to make progress payments to growers at an accelerated rate, to expedite repayment of seasonal borrowings from the Reserve Bank or to finance stock holdings for lengthy periods. It is envisaged that the Board will only be authorised to borrow commercially against fully secured outstanding debts. All borrowings will be with the approval of the Minister and a Government guarantee of repayment may be given.

(x) *First Advanced Financial Arrangements.* As has applied since 1948, the *Wheat Industry Stabilization Act* 1974 empowers the minister for Primary Industry to provide a Commonwealth Government guarantee against the borrowings the Wheat Board makes from the Rural Credits Department of the Reserve Bank to enable the Board to pay a first advance on the delivery of wheat to it. The level of the first advance is determined on each occasion by the Minister.

Wheat prices: Home consumption prices. Amending legislation, with effect from December 1969, gave the Australian Wheat Board discretionary power to sell wheat in Australia for purposes other than human consumption at prices below that set for human consumption but not less than the equivalent of the guaranteed price. However, as indicated in (v) above, at the beginning of the 1973–74 season the Board reverted to selling all wheat on the home market at a single domestic price i.e. the home consumption price.

The table following shows the home consumption prices of wheat by end usage, for the last five years.

WHEAT PRICES: HOME CONSUMPTION PRICES(*a*)(*b*)
($ per tonne)

Utilisation	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*1975–76*
Human consumption	65.40	67.63	71.10	83.40	(*c*)98.70
Manufacture of flour for industrial use	54.75	56.97			
Stockfeed (basic)	58.79	67.63			
Stockfeed (where purchaser undertakes to buy entire season's requirements from Wheat Board)	54.75	56.97			

(*a*) Australian Wheat Board basic selling price for A.S.W. bulk wheat, f.o.r. (ports) basis. (*b*) Includes a loading of $0.44 in 1971–72, $0.83 in 1972–73, $0.69 in 1973–74, $0.67 in 1974–75 and $1.15 in 1975–76, to meet freight charges on wheat shipped to Tasmania. (*c*) Increased to $99.32 from May 1976 following the inclusion of an owner/operator's allowance in the index adjustment of the home consumption price.

Wheat delivery quotas plan

In March 1969 the Australian Wheat Growers' Federation put forward proposals for the allotment of quotas on deliveries of wheat to the Australian Wheat Board. The Federation's proposals were mainly designed to bring marketable supplies of wheat more into line with available outlets, following the record 1968–69 harvest. The proposals became effective for the 1969–70 harvest. State governments have the responsibility, for constitutional reasons, of implementing the quota plan within the States and each State enacted the necessary enabling legislation. The period of operation of the legislation varies among the States.

Quotas are subject to annual review. Wheat in excess of a quota may be received from a grower if storage space is available but 'quota wheat' will receive preference as far as receival and subsequent sale by the Australian Wheat Board is concerned.

State quotas effective for the 1971–72 to 1973–74 seasons and those proposed by the Federation and agreed to by all parties for 1974–75 are given in the table below. Delivery quotas were suspended for the 1975–76 season and again for the 1976–77 season.

WHEAT DELIVERY QUOTAS
('000 tonnes)

		Seasons			
Quota	*State*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Basic	New South Wales	3,102	4,028	5,030	5,030
	Victoria	1,551	1,823	2,490	2,490
	Queensland	735	871	1,012	1,012
	South Australia	1,089	1,252	1,886	1,886
	Western Australia	2,068	2,585	3,065	3,065
	Total	*8,545*	*10,559*	*13,483*	*13,483*
Additional	New South Wales—				
	Prime hard	327	191	191	191
	Durum	54	54	54	54
	Queensland—				
	Prime hard	299	163	163	163
	South Australia—				
	Southern hard	..	109	109	109
	Total	*680*	*517*	*517*	*517*
	Grand total	**9,225**	**11,076**	**(*a*)14,000**	**(*a*)14,000**

(*a*) In terms of '000 tonnes the national and State quotas are: New South Wales 5,275, Victoria 2,490, Queensland 1,175, South Australia 1,995, Western Australia 3,065, total 14,000. In addition, for 1974–75 (as in 1973–74) provision has been made for a special pool quantity of 2,000,000 tonnes which will be available as determined by the Minister for Primary Industry, to any State that achieves deliveries in excess of its quota.

Deliveries made within the quotas established receive a first advance payment. This was $1.10 per bushel ($40.42 per tonne) for A.S.W. bulk wheat, f.o.r. ports basis for a number of years. For 1973–74 in addition to $1.10 there was a special incentive first advance payment of 10 cents per bushel ($3.67 per tonne). For 1974–75 there was the same first advance payment of $1.20 per bushel ($44.09 per tonne). The quota plan also provides that wheat received which is declared by the Australian Wheat Board to have been sold and paid for within the season will be treated as quota wheat of the season and receive a first advance payment.

The States are responsible for determining the method of allocation of individual quotas within their respective boundaries. The bases of quota allocation vary from State to State, but in the main, quotas are based on a farm's average deliveries over a recent period.

International Wheat Agreement

Details of the first and second International Wheat Agreements operative from 1 August 1949 to 31 July 1953, and from 1 August 1953 to 31 July 1956, respectively, were published in Year Book No. 42 (*see* pages 840–1) or previous issues. Details of the third, fourth and fifth International Wheat Agreements which covered the periods from 1 August 1956 to 31 July 1959, 1 August 1959 to 31 July 1962 and 1 August 1962 to 31 July 1968 were published in Year Books 43 (page 836), 48 (page 906) and 55 (page 836) respectively.

International Wheat Agreement, 1971. This Agreement came into force on 1 July 1971. It originally had a life of three years but was extended twice by protocol to 30 June 1976. The form of the 1967 International Grains Arrangement (*see* Year Book No. 55, page 836) was continued and the new Agreement comprises two separate legal instruments, namely the Wheat Trade Convention and the Food Aid Convention

The new Wheat Trade Convention ensures that the machinery for consultation and co-operation on wheat marketing existing under earlier Agreements will be maintained. The administrative body, the International Wheat Council, continues in existence. The Convention provides for the continuation of the full reporting and recording of all commercial and concessional transactions in wheat and flour.

The 1971 Wheat Trade Convention differs in an important aspect from earlier agreements in that it contains no specific pricing provisions, but the agreement specifically provides that when prices and related rights and obligations are judged capable of successful negotiation, the International Wheat Council shall arrange a further conference with the objective of bringing them into effect. In addition, an Advisory Sub-Committee on Market Conditions keeps the wheat market under continuous review. This Sub-Committee is required to report to the Executive Committee of the Council if it considers that a situation of market instability has arisen, or threatens to arise. The Executive Committee will then review the situation and try to find mutually acceptable solutions.

All major wheat trading nations except China (excluding Taiwan Province) participate in the Wheat Trade Convention. China may participate if it so wishes.

The Food Aid Convention is basically unchanged from the previous arrangement. Under this Convention a number of developed countries, importers and exporters alike, will continue to provide developing countries with food aid in the form of grains or flour for human consumption (or the cash equivalent thereof). Australia's contribution will remain unchanged at 225,000 tonnes annually (8,267,000 bushels of wheat). Minimum annual contributions under the Convention total 4,226,000 tonnes in 1975–76.

Several minor changes were incorporated in the new Food Aid Convention. A new clause provides that in exceptional cases, and on request, limited quantities of rice may be included in the program. Also, sales on credit terms of 20 years or more are eligible to be counted against aid commitments provided that maximum use is made of the other eligible forms of aid such as grants and sales for non-transferable local currency.

The International Wheat Agreement was again (in 1976) extended by protocol to run two years to 30 June 1978. The Council has established a Preparatory Group to examine the possible basis for a new agreement.

Research into the wheat industry

To the end of June 1975, the Wheat Industry Research Council and the State Wheat Industry Research Committees had spent $23,726,000 mainly through grants to the Commonwealth Scientific and Industrial Research Organization, State Departments of Agriculture, Australian Universities and Wheat Research Institutes.

SUGAR CANE

Sugar agreements and marketing arrangements in Australia

In Year Book No. 37, pages 940–1, a summary is given of the form of agreement which operates between the Commonwealth and Queensland Governments in respect of the sugar industry in Australia. Briefly, the agreement places an embargo on sugar importations and fixes the maximum price (in centres in which refineries are established and in Hobart, Launceston and Darwin) of refined sugar sold to wholesalers for consumption in Australia. The 1975 Sugar Agreement between the

Commonwealth and Queensland Governments (18th Agreement since the 1923 Sugar Agreement when the control of marketing was passed to Queensland) came into operation on 1 February 1975 for an agreed period ending 30 June 1979.

Control over production of sugar is the responsibility of the Queensland Government. At the mill level, production control is exercised by means of seasonal 'mill peaks' in respect of Queensland mills and a proportionate allowance for New South Wales mills. The combined total of 'mill peaks' approximately equals the estimated requirements of the domestic and secure export markets. Individual farm production is regulated in accordance with the production limit on that mill which the farm supplies.

The Queensland Government acquires the whole of the sugar production of that State and of New South Wales, by legislation and private agreement respectively. The net proceeds of all sugar sold are pooled and uniform prices paid to mills. Production in 1974–75 was 2,847,910 tonnes basis 94 net titre and for 1975–76 is estimated at 2,854,382 tonnes 94 net titre, of which New South Wales production contributed 103,962 tonnes.

International Sugar Agreement

The 1973 International Sugar Agreement, which is now in operation, came into force on the expiry of the 1968 Agreement; and that Agreement was preceded by the 1937, 1953, and 1958 Agreements. Details of the 1937, 1953, 1958 and 1968 Agreements were given in Year Books No. 40, pages 881–2; No. 48, page 936; No. 54, page 892; and No. 59, pages 782–3, respectively.

A United Nations Sugar Conference was convened in 1973, the last year of the 1968 Agreement, to negotiate a new International Sugar Agreement to follow on the 1968 Agreement. It was not possible to negotiate at the Conference an Agreement with regulatory provisions, such as the 1968 International Sugar Agreement, which established basic export tonnages for all exporters, a quota/price mechanism, and stockholding, supply commitment, and import limitation obligations.

The 1973 International Sugar Agreement is only an administrative Agreement. It provides for the continuation of the International Sugar Organisation, and for work to progress towards the negotiation of a new Agreement. Initally of two years duration, the term of operation of the Agreement was extended to 31 December 1976 by resolution of the International Sugar Council at its September 1975 meeting.

Australia is an exporting member of the International Sugar Organisation under the 1973 International Sugar Agreement.

Commonwealth Sugar Agreement

Under the terms of the Commonwealth Sugar Agreement, Australia has supplied over 300,000 tonnes of sugar annually for over twenty years to the United Kindgom at a negotiated price. At the 1971 triennial review of the Agreement, the annual negotiated price quota was continued at 335,000 long tons, and the negotiated price for the three years 1972 to 1974 was agreed at £stg 50 per long ton f.o.b. and stowed, bulk sugar 96° polarisation. In early 1974, it was agreed that an additional £stg 11 per ton would be paid on shipments of negotiated price sugar in the 1974 calendar year.

The Commonwealth Sugar Agreement terminated at the end of 1974, as a consequence of the United Kingdom's accession to the European Economic Community.

Exports to the United States of America

Australian sugar exports to the United States of America were, in the past, subject to the quota provisions of the United States Sugar Act, which expired at the end of 1974, and thus varied from year to year following changes in quotas as U.S. requirements and domestic production, and export availabilities of other suppliers, changed. In 1973 and 1974 exports to the U.S. totalled 230,802 and 209,381 tonnes *tel quel* sugar respectively. Following expiration of the quota provisions, 470,551 tonnes *tel quel* sugar were exported to the U.S. in 1975.

Fruit Industry Sugar Concession Committee and sugar rebates

The Fruit Industry Sugar Concession Committee was established by agreement between the Commonwealth and Queensland Governments and administers a fund provided from contributions by the Queensland Government on behalf of the sugar industry.

Until 15 May 1960 a domestic rebate of $4.33 a tonne of refined cane sugar used in processing approved fruit products was paid to Australian manufacturers, provided they bought fresh fruit for processing at prices not lower than those declared by the Committee. This was increased to $9.84 a tonne from 16 May 1960, to $14.76 a tonne from 1 July 1969 and to $15 per tonne from 1 February 1975.

The Queensland Government is responsible for payment of an export sugar rebate to exporters of approved fruit products and other approved products to ensure that manufacturers do not pay higher prices for the Australian sugar content of those products than the Australian equivalent of the world sugar parity price. Payment is made upon satisfactory arrangements having been made for payment for the fresh fruit used for processing at not less than the minimum prices (if any) which the Committee has declared.

Financial assistance to the sugar industry

Under the provisions of the *Sugar Marketing Assistance Agreement Act* 1967 and the *Sugar Industry Assistance Act* 1967 the Commonwealth Government arranged two loans to assist the return from No. 1 Pool in the 1966 and 1967 seasons. The total amount of $23,327,590 so advanced is repayable over ten years commencing in mid-1971, and was not subject to interest before then. Thereafter it incurs interest at the rate of five per cent per annum.

TOBACCO

Tobacco marketing

Between 9 May 1941 and 24 September 1948 all leaf was under the direct control of the Australian Tobacco Board, and prices were paid on leaf appraisal. Subsequently the Board was disbanded, and sales have been by open auction through the Tobacco Leaf Marketing Board (Queensland and northern New South Wales) and the Victorian Tobacco Growers Association Ltd (southern New South Wales and Victoria). In 1964 the Victorian Tobacco Leaf Marketing Board was set up to market the portion of the crop that was formerly sold by the Victorian Tobacco Growers Association Ltd, and in 1965 a Board was established in New South Wales. However, the actual physical handling of New South Wales leaf at auction is carried out by the Queensland and Victorian authorities.

In 1965 the Commonwealth and State Governments agreed to a stabilisation plan for the tobacco growing industry with an annual marketing quota of 11.793 million kilograms (green weight) of leaf to be sold under an agreed grade and price schedule providing for an average minimum price based on normal crop fall-out. The overall marketing quota is divided among tobacco-producing States according to a formula approved by the Australian Agricultural Council. The determination of grower disputes in regard to quotas from State allocations is the responsibility of State Quota Committees.

In 1968, the final year of the plan, the Governments concerned agreed that it should continue for a further period of five years with an increased marketing quota for the 1969 selling season of 12.927 million kilograms, which was subsequently increased to 14.288 million kilograms to correct industry stockholdings which were depleted by higher than expected manufacturer usage. Provision was made for an annual review of the quota and in 1970 a basic quota of 15.422 million kilograms which was set for the 1971 season was retained through to the 1976 season. Each quota is to be divided among the producing States in the same proportions as the original quota.

The plan is administered by the Australian Tobacco Board, constituted under the *Tobacco Marketing Act* 1965 and representative of the Commonwealth Government, tobacco-producing States, growers and manufacturers.

The guaranteed average minimum Australian price for the 1971, 1972 and 1973 seasons, 252.4 cents per kg, is 12.1 cents per kg above the price set for the 1970 season. The price for the 1974 season was set at 288.4 cents per kg, for 1975 at 336.4 cents per kg, and for 1976 at 347 cents per kg.

Central Tobacco Advisory Committee

The Australian Agricultural Council formed the Standing Advisory Committee on Tobacco during 1950. This Committee consisted of representatives of tobacco growers, tobacco manufacturers and the Commonwealth and State Governments. Its main functions were to review the industry and make recommendations on factors affecting its development and progress. The Committee was reconstituted as a Central Tobacco Advisory Committee in 1952–53.

In order to receive funds for increased research and extension activities, the Tobacco Industry Trust Account was established by the *Tobacco Industry Act* 1955 and came into operation on 2 December 1955. Growers and manufacturers contribute to the Trust Account by way of levies imposed on Australian leaf sold and purchased. These industry contributions are matched by the Commonwealth Government with payments made as funds are expended. The Governments of the three tobacco-producing States make fixed annual contributions. Money standing to the credit of the Account may be applied for the purpose of research and investigation in connection with the tobacco industry, the training of personnel and the publication and dissemination of scientific and technical information for the industry.

The Central Tobacco Advisory Committee is required to make recommendations to the Minister for Primary Industry in regard to expenditure from the Tobacco Industry Trust Account. By 30 June 1975 expenditure from the Account amounted to $12.5 million, and allocations for support of research projects in 1974–75 totalled $1,037,252.

Tobacco research and extension

The Commonwealth Scientific and Industrial Research Organisation closed down operations of the Tobacco Research Institute, Mareeba, on 30 June 1975. Some plant breeding work is being continued in Canberra, but this will cease in August 1976. The C.S.I.R.O. will then no longer be actively associated with tobacco research. The New South Wales Department of Agriculture ceased tobacco research activities from the end of the 1974–75 season. The Victorian Department of Agriculture and the Queensland Department of Primary Industries are expanding their research activities to take over the plant breeding program previously undertaken by the C.S.I.R.O., as well as maintaining investigations into a wide range of problems including fundamental and applied research, plant nutrition, disease and pest control and cultural practices. They are continuing to maintain extension services for tobacco growers. A Mechanisation Sub-Committee of the Central Tobacco Advisory Council was established in 1970 to investigate and advise on practical aspects of mechanisation of the tobacco-growing industry.

Tobacco factories

Manufacturers of Australian cigarettes and tobacco are granted a lower rate of duty on imported tobacco leaf, provided it is blended with a prescribed minimum percentage of Australian leaf. These percentages, which in November 1946 stood at 3 per cent for cigarettes and 5 per cent for tobacco, have been increased progressively in intervening years and since 1 January 1966 have been set at 50 per cent for both cigarettes and tobacco.

In 1974–75 the quantity of cured leaf recorded as used in tobacco factories in Australia amounted to 24.2 million kg, of which 13.6 million kg was of local origin. The balance was imported, chiefly from the United States of America.

COTTON

Final payments under the *Raw Cotton Bounty Act* 1963 were made in 1971. For further details *see* Year Book No. 59 and earlier issues.

FRUIT

Apples and pears

The *Australian Apple and Pear Corporation Act* 1973, which was proclaimed on 1 September 1974, provided for the establishment of an Australian Apple and Pear Corporation which replaced the Australian Apple and Pear Board.

The Corporation consists of nine part-time members (an independent Chairman, four members to represent growers, three members with special qualifications and one member to represent the Commonwealth Government) who are appointed for a period of three years. The Australian Apple and Pear Board's overseas representative in London has been retained by the Corporation.

Export control and regulation functions of the previous Apple and Pear Board have been absorbed by the Corporation. It also has been provided with a much wider role, e.g. powers to trade under certain circumstances, to charter shipping for such trade and, subject to Government approval, to borrow funds for trading operations. In addition, it has important functions in promotion and research in both fresh and processed apple and pear products.

Early in October 1971 the Government approved a stabilisation plan for the export of apples and pears 'at risk', with an estimated Commonwealth Government liability of $10 million over five years, commencing with the 1971 season. The plan establishes average seasonal returns (including the returns from forward sales) for each variety, which are then compared with the agreed support price for each variety and the extent of the deficiency or surplus is determined. The Government approved the recommendation of the Industries Assistance Commission Report on Fruit Growing extending the apple and pear stabilisation scheme for the 1976 season.

The Fruitgrowing Reconstruction Scheme

The Fruitgrowing Reconstruction Scheme, which commenced on 14 July 1972, provides $4.6 million to assist fruitgrowers who are in financial difficulties to remove some or all of their fruit trees and either leave the industry or put the land to other use. It is regarded as an extension of the Rural Reconstruction Scheme; fruitgrowers may receive assistance under both schemes.

A fruitgrowing industry may qualify for assistance under the Scheme if its trees take at least five years to mature, have a commercial bearing life of at least ten years, and produce fruit of which there is a chronic over-supply. The Scheme applied initially to the canning peach, canning pear, fresh apple and fresh pear industries. In March 1973 it was extended to include the canning apricot industry and provision exists for its extension to any fruitgrowing industry which meets the above criteria.

A grower is eligible to apply for assistance under the Scheme if the Authority is satisfied that the number of trees which he has, of the kind that qualifies for assistance, constitutes a commercial operation.

Two forms of assistance are offered:

Clear fell for the grower who is predominantly a fruitgrower and who is in severe financial difficulties and intends to clear fell his orchard and leave the fruitgrowing industry.

Partial fell for the grower who does not have adequate resources to withstand the short term effects on his economic viability of removing the trees without assistance; the surplus of the horticultural commodity concerned is threatening the long term viability of his property; and where the Authority considers the enterprise has sound prospects of long term commercial viability after removal of the surplus trees and using the land for other purposes.

Assistance is provided in the form of a loan which is converted to a grant after 5 years provided the grower honours his undertaking not to replant with specified trees within that period. Specified trees are those upon which assistance was paid. The maximum rate of assistance per acre is $350 for fresh fruit and $500 for canning fruit. Average rates in each State must not exceed $250 for fresh or $350 for canning fruit.

The closing date for applications for assistance was originally 30 June 1973 but it was extended to 31 December 1975. To 30 June 1975 $3.1 million had been approved to assist almost 1,000 fruitgrowers.

Canned Fruit

The overseas marketing of canned fruit is regulated by the *Canned Fruits Export Marketing Act* 1963. Under this Act the Australian Canned Fruits Board sets terms and conditions for overseas sales. All exporters must hold an export licence authorised by the Minister for Primary Industry on the recommendation of the Board. The Board comprises representatives of the Commonwealth Government (one), co-operative canners of deciduous fruit (three), proprietary canners of deciduous fruit (three), pineapple canners (one) and growers of deciduous canning fruit (three). The Board maintains a London office. The *Canned Fruits Export Charges Act* 1926 provides for a levy on exports to meet the Board's expenses, which include contributions to overseas publicity connected with the canned fruit industry. In 1963 an excise duty was imposed by the *Canned Fruits Excise Act* 1963 on canned deciduous fruit entered for domestic consumption, and the proceeds of the duty are made available to the Board.

In 1959 the Australian Canned Fruit Sales Promotion Committee was established to promote the sale of canned deciduous fruit on the home market and overseas. The operations of the Committee are financed by a levy on fruit accepted by the canneries for the production of canned fruit. The Committee comprises representatives of growers and processers of canning fruit and a representative of the Commonwealth Government.

DRIED VINE FRUITS AND WINE

The *Dried Vine Fruits Stabilization Act* 1971 (for details of the first Dried Vine Fruits Stabilization Scheme, which expired with the disposal of the 1968 crop, *see* Year Book No. 55, page 877, and earlier issues). A referendum of eligible dried vine fruit producers was held in September 1971 concerning a new five-year stabilisation plan for the dried vine fruits industry. The result of this referendum was that growers were in favour of the introduction of a new plan. Accordingly, legislation was enacted in December 1971. The plan operates as from the 1971 season for a period of five years. The scheme has been extended to cover the 1976 crop following the Industries Assistance Commission Report on Fruit Growing which recommended that the existing Dried Vine Fruit Stabilization Scheme be extended to cover the 1976 crop but should not apply beyond the 1977 crop.

The *Dried Fruits Export Control Act* 1924. For details of the Dried Fruits Export Control Act *see* Year Book No. 55, page 877, and earlier issues.

The *Wine Overseas Marketing Act* 1929 was introduced to place the overseas marketing of wine on an orderly basis. The Australian Wine Board, consisting of representatives from wineries and distilleries, grape growers and the Commonwealth Government, supervises the sale and distribution of Australian wine exported and recommends conditions under which export licences should be issued. The Board also engages in wine publicity and trade promotion activities both in Australia and overseas. In London the Board maintains an Australian Wine Centre, which is a medium for promoting interest in Australian wines and brandy. It is also a retail shop for the sale of these products. The *Wine Grapes Charges Act* 1929 provides for the imposition of a levy on all grapes used in Australia for the manufacture of wine, brandy and spirit used for fortifying wine. The proceeds of the levy are used to meet the Board's projects in Australia and overseas and to defray the administrative expenses of the Board, which has no other source of income.

Livestock and livestock products

SHEEP

Exports and imports of sheep

The movement of sheep to and from Australia is governed under Customs regulations. Exports of both breeding and slaughter sheep are subject to the provision of a permit from the Department of Primary Industry. For most breeds, these permits are freely granted. However, the export of breeding merinos was prohibited in 1929. A complete prohibition on the export of merino sheep has been maintained since then, except during a three year period between February 1970 and February 1973. In that period the prohibition was partially relaxed and up to 300 merino rams could be purchased for export each year at nominated public auctions. In February 1973 the Government reimposed the total ban on the export of merinos to any country except New Zealand pending a referendum of woolgrowers on the question of whether the export of merino rams and merino semen should be permitted and if so, whether exports should be restricted or unrestricted.

A voluntary poll of woolgrowers was held during October/November 1973 and a majority of voters favoured a continuing prohibition on the exports. Of the 123,000 persons eligible to vote 47.6 per cent returned ballot papers. Of the votes admitted to the count: 17 per cent voted for unrestricted exports, 23.3 per cent voted for restricted exports and 58.5 per cent voted for total prohibition on exports (1.2 per cent of votes were rejected as informal). The Government accepted the view of those who voted at the referendum and a complete prohibition continues on the export of all merino rams, ewes, semen and fertilised ova, to countries other than New Zealand.

Since June, 1958 there has been a prohibition on the imports of sheep (which is still operative except for sheep imported from New Zealand) to protect the Australian sheep industry from the introduction of exotic diseases, such as "blue-tongue".

WOOL

The Australian Wool Industry Conference

This body was formed by woolgrowers in October 1962 to meet the need for an organisation with sufficient authority to speak on behalf of the woolgrowing industry as a whole. It is not a statutory body and consists of twenty-five members each from the Australian Woolgrowers' and Graziers' Council and the Australian Wool and Meat Producers' Federation. The fifty member conference is presided over by an independent chairman.

The Conference makes recommendations to the Commonwealth Government on policy matters concerning the wool industry. Under the *Wool Industry Act* 1972 it is the responsibility of the Conference to nominate woolgrower representatives for appointment to the Australian Wool Corporation, and the Conference has to be consulted on the appointment of Corporation members with special qualifications. Under the Wool Tax Acts (*see* page 597) the Conference is also responsible for recommending to the Commonwealth Government what rates of levy should be paid by woolgrowers to finance the activities of the Wool Corporation and the wool research program.

Committee on Wool (Randall Committee)

In October 1971 the Commonwealth Government appointed a committee chaired by Sir Richard Randall, former permanent head of the Treasury, to report on the situation and outlook of the Australian Wool Industry. The report of the Committee on these matters was presented to the Prime Minister on 16 May 1972.

In March 1972 the Australian Wool Industry Conference submitted to the Commonwealth Government a proposal for;

(i) a revised structure for the management of the industry's affairs through the amalgamation of the Australian Wool Board and the Australian Wool Commission into a single wool authority, and

(ii) an integrated marketing system, involving a plan for acquisition of the Australian clip and influencing all of the activities bringing wool from the raw material stage to the ultimate consumer.

The Government asked the Committee to examine this proposal. The Committee presented the final report on this examination on 29 May 1972.

A report on all the investigations and findings of the Committee was released publicly in August 1972. On the A.W.I.C. proposal the Committee viewed the first part favourably but considered that some aspects of the acquisition proposal needed further clarification.

Australian Wool Corporation

Following the Australian Wool Industry Conference submission and the report of the Randall Committee (*see* above) the Australian Wool Corporation was established under the *Wool Industry Act* 1972 and came into operation on 1 January 1973. The Corporation took over the functions of both the Australian Wool Board and the Australian Wool Commission which ceased to operate on that date.

The Corporation consists of ten members, including a full-time Chairman. The Chairman is appointed for a period of five years with the other part-time members being appointed for a period of three years. Of the nine other members, four represent Australian woolgrowers, one represents the Commonwealth Government and four are members with special qualifications who have experience in the marketing, processing or manufacture of wool or wool products or in commerce, finance, economics or science. All members including the Chairman are appointed by the Minister for Primary Industry, the woolgrower representatives from a panel of names submitted by the A.W.I.C. and the four members with special qualifications after consultation with the A.W.I.C.

The functions of the Corporation, which were inherited almost directly from the Wool Commission and Wool Board (*see* below) relate to wool marketing, wool use promotion, wool testing, wool research and the management of wool stores. In addition, the Corporation is required to enquire into methods of marketing wool and to report on matters relating to marketing. A comprehensive report on wool marketing was released on 17 January 1974 in which the Corporation recommended the adoption of procedures aimed at stabilising wool prices and regulating availability. The central recommendation of the report was that the Corporation acquire ownership of all wool for export. The proposal was submitted by the Corporation to the Commonwealth Government and is under study.

For the 1974–75, 1975–76 and 1976–77 seasons, the Corporation was authorised by the Government to operate a minimum reserve (floor) price at wool auctions. Credit facilities for $350 million were provided by the Government to the Corporation for this purpose. These are additional to credit available to the Corporation from commercial sources. Woolgrowers are required to pay a levy of 5 per cent on sales proceeds of shorn wool for a reserve against possible losses from the scheme.

Funds for other activities of the Corporation (notably wool promotion) are provided jointly by woolgrowers through a levy on shorn wool proceeds (*see* below), and the Commonwealth Government.

Australian Wool Board

The Australian Wool Board which was constituted under the *Wool Industry Act* 1962 ceased to function on 1 January 1973 when the Australian Wool Corporation (*see* above) commenced operations.

For details of the Australian Wool Board *see* Year Book No. 58, page 800.

Australian Wool Commission

The functions of this body, which began operation in November 1970 under the *Wool Commission Act* 1970, were taken over by the Australian Wool Corporation on 1 January 1973.

For details of the Commission's activities *see* Year Book No. 58, pages 802–3.

Wool levy

Since 1936 a statutory levy has been collected from woolgrowers to finance wool promotion activities. The initial rate of 5c a bale was increased at the request of woolgrowers to 20c a bale in 1945 and 40c a bale in 1952, the latter rate continuing until 1960. Further details regarding the operation of this levy prior to 1957 appear in Year Book No. 48, page 978.

Under legislation passed in 1957 provision was also made for the payment by woolgrowers of a contribution for wool research which was fixed at 20c a bale. In 1960 the wool promotion levy was raised to 50c a bale, and the following year it was increased further to $1 a bale. The operation of this rate was subsequently extended for 1962–63 and 1963–64.

On 1 July 1964 the basis for collecting the woolgrowers' combined levy for wool promotion and research was changed from a flat rate per bale to a percentage deduction from the gross value of shorn wool sold. A maximum rate of 2 per cent was fixed, but provision was made for a lower rate to be prescribed, if appropriate. For 1964–65 the rate was set at 1.875 per cent, which involved a substantial increase in payments by woolgrowers for promotion (from $1 per bale to the equivalent of about $2.70 per bale), while the research component of the levy was left unaltered at 20c per bale. In 1965–66 the levy was set at 2 per cent and it remained at the maximum rate till 1969–70. From 1 August 1970, the rate of levy was reduced to 1 per cent.

Following agreement between the Australian Wool Industry Conference and the Government on overall funding of wool research and promotion activities, the rate of the levy for 1973–74 was raised to 2.4 per cent, for 1974–75 to 2.75 per cent and for 1975–76 to 3 per cent. The rates for these years include a loading (previously collected as a separate charge) for the administration costs of the Corporation's activities in the wool marketing field.

The imposition and collection of the combined levy from woolgrowers is governed by six complementary Acts, the *Wool Tax Acts* (*Nos.* 1 *to* 5) 1964 and the *Wool Tax Administration Act* 1964.

From 2 September 1974, an additional component of 5 per cent was added to the wool levy. This component is collected to provide a reserve against any losses that may be incurred from the operation of the minimum reserve price scheme at wool auctions.

Commonwealth Government's contributions to wool research and promotion

In 1945 the Commonwealth Government commenced contributing on a statutory basis to wool research. Initially the contribution was at the rate of 20c a bale, but this was doubled in 1957 to 40c a bale. At this rate the Commonwealth Government contributed about $2 million to wool research in 1965–66, and a similar sum was provided in 1966–67.

Prior to 1964–65 the Commonwealth Government had not contributed to wool promotion. However, following representations made by the Australian Wool Industry Conference, the Government undertook to provide assistance to the Australian Wool Board in financing its commitment to the greatly expanded wool promotion program of the International Wool Secretariat. The expanded wool promotion program, announced by the Secretariat, envisaged an increase in the Wool Board's annual contribution to overseas wool promotion campaigns from the then level of $5 million to about $20 million.

From 1 July 1964 the Commonwealth Government undertook to match on a $1 for $1 basis any increase in contributions by woolgrowers for wool promotion in excess of the levy of $1 a bale then in force, and the Wool Industry Conference agreed to increase the growers' levy to the equivalent of about $2.70 a bale, which resulted in a Government commitment of about $1.70 a bale. In aggregate this commitment entailed a Commonwealth Government contribution for promotion of about $8 million a year. This arrangement operated until 30 June 1967.

During 1967 the Wool Industry Act was amended following negotiations between the Executive of the Australian Wool Industry Conference and the Government. The amendment provided for a Government contribution for wool research and promotion during the three years 1967–68 to 1969–70 on a $1 for $1 basis matching woolgrowers' contribution by levy, to a maximum of $14 million in any one year. It provided for the grower levy and the Government grant to be apportioned annually between wool research and promotion by the Minister for Primary Industry after considering the recommendations of the Australian Wool Industry Conference. No change occurred in the legislation providing for the payment by woolgrowers of a levy at a rate not exceeding 2 per cent per annum.

When arrangements for Government financial support for wool research and promotion expired on 30 June 1970, the Government increased its contributions for these activities to an average of $27 million a year for each of the three years 1970–71 to 1972–73. At the same time, as mentioned above, the levy on woolgrowers was reduced from 2 per cent to 1 per cent of the gross proceeds from the sale of shorn wool.

For 1973–74, pending a Government review of the programming and funding of wool research and promotion, the overall expenditure of $43.8 million for wool research and promotion was financed by a Government grant of $22 million and by revenue from the Wool Tax—2.4 per cent of the gross proceeds from the sale of shorn wool. Following its review of the funding of wool research and promotion, the Government decided to provide one-half of the cost of the approved wool research and promotion programs. In 1974–75 and the subsequent two years it is supporting three-quarters of the cost of the research programs and one-quarter of the promotion programs. This has involved Government contributions of $22 million in 1974–75, $20 million in 1975–76, and $21 million in 1976–77.

Australian Wool Marketing Corporation Pty Ltd

The functions of this body, which began operations on 1 July 1970 were taken over by the Australian Wool Commission (*see* above) in November 1970. For details of the Marketing Corporation *see* previous issues of the Year Book.

Emergency financial assistance for woolgrowers

In the 1970–71 Budget an amount of up to $30 million was provided for emergency assistance to woolgrowers to offset to some extent the decline in wool income resulting from the drastic slump in wool prices between 1968–69 and 1969–70. About $21.5 million was paid out in grants to over 21,000 woolgrowers during 1970–71 and 1971–72.

Wool Deficiency Payments Scheme

This scheme was initially introduced for the 1971–72 season, to give woolgrowers a guaranteed minimum return for their wool clip. It was subsequently extended for a further period of twelve months. The operative provisions of the legislation lapsed at 30 June 1973. For details of the Wool Deficiency Payments Scheme *see* Year Book No. 58, page 803.

Objective measurement of wool

In 1969 the former Australian Wool Board, through its Objective Measurement Technical Committee and Objective Measurement Policy Committee, began investigations into the objective measurement of wool and the significance of this development for the marketing of the Australian wool clip.

In 1970 the Commonwealth Government provided $1.5 million for work on research and implementation of objective measurement techniques.

The findings of the Committees were presented to the Board in December 1972, and pointed to significant changes from the traditional processes involved in every stage of the marketing process. Savings of several dollars per bale could be achieved in the marketing of wool, especially through the separation of handling and selling centres of wool. The Committee noted that further refinements and developments in techniques would occur.

The Department of Primary Industry has established a monitoring unit, as recommended by the Committee, to ensure the maintenance of standards and accuracy in sampling and measurement of wool for sale by sample and objective measurement. The unit, the *Australian Wool Measurement Standards Authority*, operates a voluntary registration scheme for wool testing laboratories and sampling sites. Prior to registration, laboratories and sampling sites are closely inspected by the Authority's officers to ensure they meet the high standards required. After registration, continuing surveillance is employed to ensure the required standards are maintained.

MEAT

Australian Meat Board

The Australian Meat Board is the body responsible for controlling the external marketing of Australian beef, mutton and lamb. It consists of six members representing meat producers, two representing meat exporters, one representing the Commonwealth Government, and an independent Chairman. The Board's primary function is to ensure that Australian meat exports are marketed in a manner which will safeguard the long-term interests of the Australian meat industry.

The Board regulates overseas marketing of Australian meat by means of an export licensing system. It has power of control over the kinds of meat that may be exported by licensed exporters to particular places, or to particular agents and representatives. The Board also has power to undertake measures to promote the sale and consumption of meat both in Australia and overseas, and it may purchase and sell meat in its own right for the purpose of market development. However, the exercise of this power is limited to activities aimed at meeting special marketing problems or circumstances which preclude the effective participation of private traders. The Board may also purchase and sell meat, with the approval of the Minister for Primary Industry, for the purpose of administering any international arrangements to which Australia may be a party.

Meat research schemes

In November 1965 the Commonwealth Parliament passed legislation providing for the extension of the cattle and beef research scheme to cover beef, mutton and lamb research. Details of the beef research scheme were set out on page 1050, Year Book No. 51. Under the new legislation the Cattle and Beef Research Committee was re-constituted as the Australian Meat Research Committee, its powers and functions being similar to those of the former Committee extended to include mutton and lamb research. The Meat Research Committee consists of twelve members—seven meat producer representatives, the Chairman of the Australian Meat Board (Chairman), one representative from the universities engaged in meat research, the Commonwealth Scientific and Industrial Research Organization, the Australian Agricultural Council, and the Department of Primary Industry. The new Committee came into being in March 1966 and the Cattle and Beef Research Committee ceased to exist from that date.

The scheme is financed from the Livestock Slaughter Levy (*see* below). The Commonwealth Government makes a matching contribution on a $1 for $1 basis to meet expenditure on research. The research is conducted by such bodies as the universities, C.S.I.R.O., State Departments of Agriculture and the Bureau of Agricultural Economics.

The Minister for Primary Industry approved a beef research program of $3,004,304, and a mutton and lamb research program of $1,337,851 for 1974–75.

The Livestock Slaughter Levy

The *Livestock Slaughter Levy Act* 1964 imposed a levy on all cattle (over 90 kg dressed weight), sheep and lambs slaughtered within Australia for human consumption. These levies operated from 1 August 1964 and have replaced the charge imposed on meat exports and also subsumed the cattle levy for beef research purposes imposed in 1960 (*see* Year Book No. 51,) page 909. In November 1968 legislation was passed amending the Act to provide for an additional levy to finance service and investigation activities relating to meat processing. The present legislation (the *Livestock Slaughter Levy Act* 1964) now provides three elements in the levy for each class of livestock—an amount to finance meat research; an amount to finance the operations of the Australian Meat Board; and, an amount to finance service and investigation activities relating to meat processing. The first two elements are paid by producers while the third element is paid by meat processors.

Under the Act the total levy may not exceed 75.0c a head for cattle or 7.5c a head for sheep and lambs. The amount levied for research may not exceed 25.0c a head for cattle or 3.3c a head for sheep and lambs, while the amount for service and investigation activities relating to meat processing is set for the period of its operation at 1.0c a head for cattle and 0.1c a head for sheep and lambs. The present operative rate for cattle is 56.0c (25.0c for research; 30.0c to the Australian Meat Board; 1.0c for service and investigation) and for sheep and lambs, 4.85c (1.75c for research; 3.00c to the Australian Meat Board; 0.10c for service and investigation).

The Meat Export Charge

The *Meat Export Charge Act* 1973 imposes a charge on the exports of meat. A charge of 1.0 cents per lb is imposed on exports of meat and edible offals of cattle, sheep, lambs, goats and pigs and the revenue is to recoup to the Government the cost of export meat inspection. A further 0.6 cents per lb is imposed on beef and veal exports in order to recover to the Government the cost of the National Brucellosis and Tuberculosis Eradication Campaign.

United Kingdom long-term purchase arrangements

Details of the long-term meat contracts with the United Kingdom from 1939 to 1952 and of the Fifteen Year Meat Agreement (1952–1967) are given on page 710, Year Book No. 41 and in earlier issues. In September 1953 the trade in meat between the United Kingdom and Australia reverted to private traders. The main features of the arrangements were given in Year Book No. 47, page 960. Details of minimum prices operating and deficiency payments received in recent years under private trading appear in Year Book No. 48 (page 973) and No. 50 (page 1068).

On 30 September 1967 the Fifteen Year Meat Agreement expired, and no new agreement has been negotiated. Australia retained duty-free entry for meat until 1 July 1971 when a variable levy system for beef and veal imports and duties on mutton and lamb were introduced by the United Kingdom Government in preparation for entry into the European Economic Community (E.E.C.).

The United Kingdom became part of an enlarged E.E.C. in 1973 and will progressively adopt the mechanism of the E.E.C. Common Agricultural Policy (C.A.P.) over the period up to 1977. Under the C.A.P., beef and veal imports are mainly controlled by a system of variable levies. At present the C.A.P. does not apply to mutton and lamb but the United Kingdom will gradually increase its duties on mutton and lamb until the level of the full E.E.C. duty (20 per cent) is reached in 1977.

Lamb Guarantee Scheme

The Australian Meat Board, under the scheme, guaranteed exporters a minimum price on all lambs approximately 16 kg and under shipped to the United Kingdom. The scheme operated from 1962–63 lamb export season until it was discontinued by the Board in March 1972. Details of the scheme are shown in Year Book No. 58, page 811.

United States of America-Australia Meat Agreement

In February 1964 the Governments of Australia and the United States of America concluded an agreement for the regulation of beef, veal and mutton exports from Australia to the United States with the object of promoting the orderly development of the trade in these classes of meat between the two countries. (Details of the Agreement were given on page 820 of Year Book No. 56). In June 1970, the United States advised that it was terminating the Agreement at the end of 1970. Legislation enacted by the United States Congress in 1964, details of which were given in previous issues of the Year Book, provides for restrictions on imports of fresh, chilled and frozen beef, veal, mutton, and goatmeat from all sources if such imports are estimated by the United States Secretary of Agriculture to exceed a predetermined figure (the trigger point) calculated by a formula in the legislation. Should quotas be necessary the total permissible imports would be set some 10 per cent below the trigger point. Until 1968 the estimate of imports did not exceed the trigger point and quotas were not necessary. However, late in that year it appeared likely that quotas would be triggered and to avoid this all major suppliers agreed to restrain shipments. The total restraint level was set approximately halfway between the quota level and trigger point. A similar situation arose in 1969 and 1970 and restraints again operated. However in June 1970 the estimate of imports exceeded the trigger point and the United States President suspended the operation of quotas and announced new higher restraint levels for all major suppliers. In 1971 the United States President exercised, as in 1970, his powers under the legislation and announced that the operation of quotas would be suspended as suppliers had agreed to enter into a restraint agreement with the United States to keep the import level to 517,900 tons. In June 1972, the President announced that the restraint arrangements for 1972 had been suspended for the remainder of the year in an effort to control increases in meat prices in the United States. Restraints have been suspended since that time, but the situation is still subject to quarterly review.

Pig Industry research

A general description of research commenced in 1971 into the Australian pig industry appears in the section, The Pig Industry page 816.

POULTRY INDUSTRY

Stabilisation scheme for the egg industry

An Australia-wide stabilisation type of scheme for the egg industry has been in operation since 1 July 1965. The principal features of the scheme are embodied in three Acts—*Poultry Industry Levy Act* 1965, *Poultry Industry Levy Collection Act* 1965, and *Poultry Industry Assistance Act* 1965.

The scheme provides for the imposition of a levy on hens over six months of age kept for commercial purposes. The money obtained from the levy is mainly used to meet trading losses on surplus eggs. Previously, returns to producers were equalised by State Egg Boards, who imposed an equalisation deduction to cover deficits which resulted from sales to overseas markets.

In determining the rate of the hen levy, the Minister for Primary Industry is required to take into consideration any recommendations by the Council of Egg Marketing Authorities of Australia (which consists of all members of the State Egg Marketing Boards) and is precluded from prescribing a rate in excess of such recommendations. The maximum rate of levy permitted under the legislation is $1 per hen per annum. The levy is payable fortnightly by the owner of the hen. The levy operated at its maximum from 1972–73. The fortnightly rate of levy in accordance with the recommendations of the Council of Egg Marketing Authorities of Australia was 4 cents from 1972–73. As the maximum of $1 per hen was reached each year after twenty-five fortnights, no levy was imposed for the last prescribed days from 1972–73.

Exemptions from payment are granted on the first twenty hens in each flock and also on a substantial proportion of broiler breeder hens. The eggs produced by broiler breeder hens which are not used for hatching determine the proportion of those hens on which the levy becomes payable in accordance with a formula incorporated in the legislation.

By arrangement between the Commonwealth and State Governments, the State Egg Boards collect the levy due in each State from individual producers and remit the total amount to the Commonwealth Government (the Department of Primary Industry collects the levy in the Australian Capital Territory). The Commonwealth Government pays into the Poultry Industry Trust Fund amounts equal to the receipts obtained from the hen levy. These amounts totalled $12,872,493 in 1974–75 ($11,612,025 in 1973–74). Payments from the Fund made to the State Government for financial assistance to the poultry industry, and are authorised by the Minister for Primary Industry, after consideration has been given to the recommendations by the Council of Egg Marketing Authorities of Australia. Payments from the Trust Fund totalled $12,734,437 in 1974–75 ($11,532,302 in 1973–74).

Research

The *Poultry Industry Assistance Act* 1965 makes provision for expenditure for research purposes to be allocated from the Poultry Industry Trust Fund.

The Act also provides for a contribution limited to $100,000 each year from the Commonwealth Government to support poultry research on dollar for dollar matching basis with industry funds, up to a total of $200,000.

Research projects are recommended by the Council of Egg Marketing Authorities of Australia for approval by the Minister for Primary Industry. Expenditure may be approved for scientific, technical or economic research, the publication of reports thereon, the training of persons for research, and the dissemination of information and advice on scientific, technical or economic matters.

Chicken Meat Research

In June 1969, a research scheme for the chicken meat industry was established along lines similar to those operating for the wool, wheat, dairy, meat, tobacco and poultry industries. The operative Acts are the *Chicken Meat Research Act*, 1969, the *Meat Chicken Levy Act*, 1969 and the *Meat Chicken Collection Act*, 1969. This legislation provides for a levy of one-tenth of a cent on each meat chicken hatched before 1 July 1972 and, thereafter, for a levy at a prescribed rate not exceeding one-quarter of a cent per meat chicken hatched. Hatcheries, hatching less than 20,000 meat chickens per annum, are exempt from the levy. The legislation also provides that the industry levy be paid into a Trust Account and that research expenditure therefrom be matched on a $1 for $1 basis by the Commonwealth Government. On this basis, it is estimated that funds currently available for research will be $374,022 for 1974–75.

Marketing of eggs

Details of the *Egg Export Control Act* 1947 were given in earlier issues of the Year Book (*see* No. 47, page 997).

DAIRY PRODUCTS

Dairy Industry Stabilisation Fund

Amounts realised on exports of butter and cheese were, in 1948–49 and 1949–50, in excess of the f.o.b. equivalent of the then guaranteed return and were credited to the Dairying Industry Stabilisation Fund, which was established in July 1948 for the purpose of stabilising returns from exports. During 1951–52 the Stabilisation Fund met the deficiency in respect of all exports which did not earn sufficient to meet the basic return to the factory. From 1 July 1952 to 30 June 1957 it was available to the industry to be used, in whatever manner it considered desirable, to make good any deficiency in respect of all exports other than the 20 per cent provided for under the Commonwealth Government's five-year stabilisation plan. The Act was amended in 1957 to enable the Australian Dairy Produce Board (since 1 July 1975 the Australian Dairy Corporation) to use the fund for such other purposes as are approved by the Minister for Primary Industry and this amendment was later extended by the *Dairying Industry Act* 1967 to the present time. The balance of accumulated funds in the Dairying Industry Stabilization Fund at 30 June 1975 totalled approximately $6,019,000. The major portion of the fund represents capital and other investments in milk recombining plants now established by the Corporation in the Democratic Republic of Cambodia, Indonesia, the Philippines and Thailand. Approved expenditure in excess of $200,000 in any year may be met from unmatched contributions and income from sales.

Processed milk products. As part of the sixth five-year Stabilisation Plan the Government provided, under the *Processed Milk Products Bounty Act* 1962, for the payment of a maximum amount of $800,000 as a bounty on exports of processed milk products in each year. Details of earlier bounties are given in Year Book No. 58, page 818. In July 1973 it was decided to phase out the bounty on the exports of processed milk products over the two-year period ending 30 June 1975. Expenditure on the bounty in respect of exports in 1973–74 amounted to approximately $535,000 and in 1974–75 to approximately $520,000.

Whole milk. In addition to the bounties referred to below, the Commonwealth Government subsidised the production of whole milk consumed directly from 1943–44 to 1948–49. Details of the amounts distributed during each year will be found in Year Book No. 38, page 1031.

Commonwealth Government bounties and stabilisation plans

Butter and cheese. Under the provisions of the various Dairy Industry Assistance Acts, the first of which was passed in 1942, the Commonwealth Government provided bounties on milk supplied for the manufacture of butter and cheese. Bounties were paid on a seasonal basis prior to 1 April 1946, but subsequently paid on a flat rate basis. Bounties were distributed by the Commonwealth Dairy Produce Equalisation Committee Ltd through factories to milk and cream producers by payments on butter and cheese manufactured. Details of the three five-year stabilisation plans which operated up to 30 June 1962, will be found in Year Book No. 49, page 1084. Information regarding the plan which operated during the five years ended 30 June 1967 appears in Year Book No. 52, page 961 and details of the plan which concluded on 30 June 1972 are given in Year Book No. 58, page 818.

The sixth five-year stabilisation plan, which came into operation on 1 July 1972, provided for the continuation of financial assistance on butter and cheese production and an export bounty on processed milk products. In July 1973 the Commonwealth Government decided to phase out financial assistance provided under the stabilisation plan over the two-year period ending 30 June 1975, and instead to place greater emphasis on adjustment assistance for the dairy industry. For details of the sixth and earlier stabilisation plans *see* Year Book No. 59, and earlier issues.

The bounty on butter and cheese for the 1974–75 season was $9 million and that was the final payment of financial assistance geared directly to output.

Marginal Dairy Farms Reconstruction Scheme

The Marginal Dairy Farms Reconstruction Scheme was introduced in July 1970 to operate for a period of four years. It provided funds up to a maximum of $25 million to State Governments to purchase marginal dairy farms from producers wishing to leave the industry. The land acquired was sold on favourable terms to neighbouring farmers so as to build up their holdings to an economic size. When the scheme expired in July 1974, 1,136 dairy farms had been offered to the States for acquisition; purchase and subsequent sale of 576 had been arranged; 348 applications had been rejected; and 205 applications had been withdrawn or had lapsed. The cost of purchase amounted to $14.9 million. The scheme has now been replaced by the Dairy Adjustment Program.

Australian Dairy Adjustment Program

The Marginal Dairy Farm Reconstruction Scheme was broadened into an Australian Dairy Adjustment Program. Assistance available under the Program includes a comprehensive range of measures to enable non-viable dairy farmers to build-up their properties into sound economic units; and interest-free loans to help suppliers change over to refrigerated bulk milk delivery with concurrent assistance as necessary to dairy factories.

To 31 December 1975 assistance of $28.8 million to the dairy industry had been approved under the Program. This comprised 2,491 loans amounting to $14.6 million for farm conversion to refrigerated bulk milk; 263 cases involving property amalgamation amounting to $8.5 million; 552 farm development loans amounting to $3.4 million; 6 loans for diversification out of dairying; and 12 loans to dairy factories amounting to $2.0 million for receival and processing facilities in connection with the receipt of whole milk.

Marketing of dairy products

The export trade is regulated by the terms of the Commonwealth *Customs Act* 1901 and the Australian *Commerce* (*Trade Descriptions*) *Act* 1905 and regulations thereunder. This legislation requires that the true trade descriptions, etc., be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

In 1975 the Commonwealth Parliament passed the *Dairy Produce Act* 1975 which substantially amended the *Dairy Produce Export Control Act* 1924. The provisions of the amended Act provided for replacement of the Australian Dairy Produce Board with the Australian Dairy Corporation from 1 July 1975.

The Corporation comprises eleven members consisting of an independent chairman, three members representing dairy farmers, three members representing manufacturers, two members with special qualifications, one representative of employees in the dairy industry and one government representative. Its composition was designed to achieve a balanced membership to enhance the Corporation's ability to perform its functions in a modern marketing environment.

The Corporation assumed the existing functions and powers of the Australian Dairy Produce Board. Full details of these functions and powers were given in earlier issues of the Year Book (*see* No. 48, pages 999–1000).

The Corporation was given additional powers to those exercised by the former Board in three main areas. Firstly it has the power, after consultation with appropriate industry bodies to determine the quantity of dairy produce which may be exported to the particular country or countries in the course of a season. Secondly, the Corporation may acquire a monopoly trading power for specific export markets by regulation after consultation with the industry. Thirdly the borrowing powers of the Corporation were broadened to allow it to provide advances, not only to cover dairy produce intended for export, but also to cover winter stocks of dairy produce subsequently withdrawn for the local market.

Equalisation schemes

Reference is made to the butter and cheese equalisation schemes in Year Book No. 48, pages 998–9. Particulars of the returns realised on local and overseas sales and of the average equalisation rate for the years ended June 1971 to 1976 are given on page 813 of this issue. Details are also given on page 812 of the wholesale prices of butter and cheese for home consumption.

An equalisation scheme for casein similar to that for butter and cheese has been operated since 1952 by the Commonwealth Dairy Produce Equalisation Committee Ltd. Average realisations per tonne under the scheme were $570.60 in 1971–72, $678.57 in 1972–73, and $678.89 in 1973–74. The interim rates for 1974–75 and 1975–76 are $970.00 per tonne and $650.00 per tonne respectively. (Details of returns for earlier seasons are given in previous issues of the Year Book.)

From 1 July 1970 a skim milk powder equalisation scheme was commenced by the Commonwealth Dairy Produce Equalisation Committee Ltd. Rates for 1971–72, 1972–73 and 1973–74, were $281.57 $333.04 and $394.20 per tonne respectively. Interim rates for 1974–75 and 1975–76 are $500 per tonne and $250 per tonne respectively.

Statutory support for the equalisation scheme was provided by legislation passed by Parliament during 1970 and ratified by producers at a referendum held in February 1971. The legislation consists of the *Dairying Industry Equalisation Act* 1970, the *Dairying Industry Levy Act* 1970, and the *Dairying Industry Levy Collection Act* 1970. (*See* Year Book No. 57, page 818.)

The basic element of the legislation is the establishment of a fund by way of a levy on the production of butter, butteroil, cheese, casein and such other dairy produce as may be prescribed to provide the necessary finance for equalisation payments. The legislation has been designed to permit the imposition of the levy on one product or a number of products as circumstances warrant. It will not be implemented unless there is a specific need created such as by the withdrawal of an important manufacturer from the present voluntary equalisation scheme.

Research and promotion of the dairying industry

Dairy industry research and sales promotion. At the request of the Australian Dairy Industry Council, legislation was enacted in 1958 to provide for a sales promotion campaign for butter and cheese in Australia and also for research into industry problems (funds for research being matched by Government contributions, *see* below). The legislation provided for levies on the manufacture of butter and cheese (the Dairy Produce Levy) which were initially set at operative rates of 0.104 cents per lb (0.229 cents per kilogram) for butter and 0.052 cents per lb (0.115 cents per kilogram) for cheese, the proceeds being divided equally between research and sales promotion. The operative rates of levy were increased from November 1959 to 0.156 cents per lb (0.344 cents per kilogram) for butter and 0.078 cents per lb (0.172 cents per kilogram) for cheese (the maximum amounts permitted under the legislation) with two-thirds of the funds raised being allocated to sales promotion and one-third to research. In August 1964, the legislation was amended to include butter powder at the same rate as for butter, i.e. 0.156 cents per lb (0.344 cents per kilogram).

In 1965, the Dairy Produce Levy Act was repealed and replaced by the Butter Fat Levy Act which provided for one levy on butterfat used in the manufacture of butter, cheese and related products. The maximum rate of levy was set at 60 cents per cwt (1.18 cents per kilogram) of butterfat, comprising 12 cents (0.24 cents per kilogram) for research, 24 cents (0.47 cents per kilogram) for sales and domestic promotion, and 24 cents (0.47 cents per kilogram) for administration and overseas promotion. The operative rates of levy for those three categories were initially 8 cents per cwt (0.16 cents per kilogram), 22 cents (0.43 cents per kilogram) and 20 cents (0.39 cents per kilogram) respectively, i.e. a total of 50 cents (0.98 cents per kilogram).

Following several minor increases, the operative levy rate reached 58 cents per cwt (1.14 cents per kilogram) of butterfat from 1 October 1971. Of this amount, 10 cents (0.20 cents per kilogram) was used for research, 24 cents (0.47 cents per kilogram) for promotion and 24 cents (0.47 cents per kilogram) for administration and overseas market development. Research levies have been collected under Dairying Research Acts (*see* below) since 1 July 1972 and the butterfat levy (maximum and operative) was reduced to 48 cents per cwt (0.94 per kilogram) of butterfat from that date. The sales promotion program has throughout been financed solely from the industry levy.

The table following shows the levies collected for research and sales promotion during the past five years.

BUTTERFAT LEVY: AMOUNTS COLLECTED FOR RESEARCH AND SALES PROMOTION

($)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Research(*a*)	387,088	370,824	(*b*)	(*b*)	(*b*)
Sales promotion	923,494	886,911	858,530	836,412	802,035
Total collected(*a*)	**1,310,582**	**1,257,735**	**858,530**	**836,412**	**802,035**

(*a*) Excludes amounts contributed by the Commonwealth Government. (*b*) Since 1 July 1972, research levies have been collected under Dairying Research Acts 1972 (*see* below).

From 1958 onwards, the Commonwealth Government has contributed one-half of the costs incurred on approved projects included in the program of research, with a maximum contribution of $1 for $1 against funds raised by way of levy and allocated to research. The Dairy Produce Research Committee administered the research scheme and made recommendations through the Australian Dairy Produce Board to the Minister for Primary Industry.

In February 1972, the Commonwealth Government agreed to industry proposals to broaden the scope of the research levy so that it would apply to all dairy farmers, irrespective of the end-use of the milk or cream produced. Later that year, to implement the new scheme, five Acts were passed: Dairying Research Act; Dairying Research Levy Act; Dairying Research Levy Collection Act; Dairy Produce Sales Promotion Act; Butter Fat Levy Act.

The research levies are payable either on a butterfat or volume basis, according to the normal method of payment to the producer by the dairy factory or authority. The maximum rates of these levies are 12 cents per cwt (0.24 cents per kilogram) of butterfat or 0.04 cents per gallon (8.8 cents per thousand litres) of milk. The operative rates are prescribed by regulation and since 1 July 1972 have been 10 cents per cwt (0.20 cents per kilogram) of butterfat and 0.033 cents per gallon (7.3 cents per thousand litres) of milk. The research scheme came into operation on 1 July 1972 and levies collected amounted to $486,190 in 1972–73, $534,769 in 1973–74 and $481,798 in 1974–75.

The 1972 legislation established a separate statutory body, the Dairying Research Committee, to control and administer the research funds. (The sales promotion program continues to be administered by the Australian Dairy Corporation.) The Chairman of the Corporation is also Chairman of the Dairying Research Committee.

Allocations from the Dairying Research Trust Account totalled $844,794 in 1972–73, $958,392 in 1973–74 and $962,571 in 1974–75. The Commonwealth Government has continued to match research expenditure on a dollar for dollar basis.

THE BEE-FARMING INDUSTRY

Honey Levy

For details of the Honey Levies *see* under Bee-Farming, page 826.

CHAPTER 23

WATER RESOURCES

RESOURCES, UTILISATION AND NATIONAL AND INTERSTATE ASPECTS

Official Year Book No. 51, pages 228–31, contains a description of recent developments in the measurement of Australia's water resources. For information concerning general, descriptive and historical matter *see also* Year Book No. 37, pages 1096–1141.

An article on droughts in Australia appeared in Year Book No. 54, pages 991–6.

For further details on geographical and climatic features determining the Australian water pattern, *see* the chapter Climate and Physical Geography of Australia; on water supply and sewerage in metropolitan areas, cities and towns, the chapter Public Finance; and on the generation of hydro-electric power, the chapter Electric Power Generation and Distribution, of this issue.

A series of maps showing the location of major dams and reservoirs and the various irrigation schemes operating in each of the States may be found on pages 259–65 of Year Book No. 46, and a map showing the extent of known artesian basins throughout Australia is shown on page 273 of Year Book No. 48.

Water resources and their management

Geographic background

General. Water resources are determined by rainfall, evaporation and physical features including soil, vegetation and geology. Chapter 2, Climate and Physical Geography of Australia, contains a detailed description of the climatic features of the country and a brief description of the landforms. In assessing Australia's water resources, dependability and quality of supply must be considered, as well as amount.

Topography. The major topographical feature affecting the rainfall and drainage patterns in Australia is the absence of high mountain ranges over most of the continent. The Main Divide along the eastern coast is composed of sloping tablelands and uplands which generally do not exceed 1,200 metres in altitude, the highest point being Mount Kosciusko at only 2,228 metres. The western half of the continent is mainly a great plateau between 300 and 600 metres in altitude, while the interior consists of plains below 200 metres with a marked depression descending to 15 metres below sea level in Lake Eyre. It has been estimated that over half the country's area has a slope of less than one in one hundred.

Drainage. Only one-third of the Australian land mass has direct external drainage to the ocean. This occurs mainly in the east on the coastal side of the Main Divide and inland with the Murray-Darling system which benefits from the better-watered southern highlands. In the west, small watersheds are formed by the Darling Range and the Hamersley and Kimberley plateaux, while in the north the raised rim of the Georgina Basin separates the shorter rivers of the Gulf of Carpentaria coast from the interior drainage of the Barkly Tableland. With the exception of the Murray-Darling system, most rivers draining to the ocean are comparatively short because of the proximity of the highland areas to the coast and, for the same reason, these rivers account for the majority of the country's average annual discharge.

The remaining two-thirds of the country are interior lowlands which exhibit endoreic drainage patterns characteristic of a desert regime, i.e. disconnected ephemeral river systems and terminal salt lakes. In central Australia, each isolated upland has a radiating drainage system which dies out on the surrounding plains, while on the western plateaux, older stream systems have been disrupted by barriers of alluvium or aeolian sand. Surface drainage is totally absent from some arid areas of low relief and pervious cover such as the limestone Nullarbor Plain.

Climate. Australia has an area of almost 7.7 million square kilometres and a latitudinal range of about 3,700 kilometres, resulting in climatic conditions ranging from the alpine to the tropical. But two-thirds of this area is arid or semi-arid, a result of its location approximately between latitudes 10°S and 40°S, a zone which contains most of the great deserts of the world. Generally, the northern part of the continent comes under the influence of the Australian-Asian monsoon which results in a summer wet season and a winter dry season, while southern Australia is subject in winter to the rain-producing influences of the great atmospheric depressions of the Southern Ocean. Consequently good rainfalls (over 800 mm annually) occur in the northern monsoonal belt and along the eastern and southern coastal highland areas, which total only 12 per cent of the country's area, while nearly 30 per cent of the land mass receives less than 200 mm per annum.

The effectiveness of the rainfall over most of Australia is greatly reduced by marked alternation of wet and dry seasons, unreliability from year to year, high temperatures and high potential evaporation. Average annual tank evaporation rates increase generally from about 1,000 mm in the temperate south-eastern and south-western coastal areas of mainland Australia to over 3,300 mm in the arid centre; for further details *see* pages 54–55. In a twenty-year period, on the north-eastern coast, Mackay averaged 1,400 mm of rain per annum, but experienced one year of only 900 mm and another of 3,200 mm, a pattern of variability which is common throughout Australia; *see* also page 35.

Settlement. The availability of water resources controls, to a large degree, the possibility and density of settlement; and these in turn influence, through production and disposal of waste, the quality of the water. Most early settlements were established on the basis of reliable surface water supplies and, as a result, Australia's population is concentrated along the coast, mainly in the comparatively fertile, well-watered east, south-east and far south-west. As early as 1795, the effect of settlement on water quality was shown when an order was issued forbidding the pollution of the Tank Stream, the only water supply for the infant settlement at Sydney Cove. Fouling of the stream became worse as settlement increased until it was finally abandoned as a source of water in 1826. Today, the major water pollution problems in Australia are associated with the cities, irrigated agriculture and mining activities.

As settlement spread into the dry inland grazing country last century, the value of reliable supplies of underground water was realised and in 1857 the earliest known official investigation of groundwater resources was reported to the Victorian Legislative Assembly. Subsequently, observations of the disappearance of large quantities of the rainfall precipitated on the coastal ranges of eastern Australia led to the hypothesis of the existence of the Great Artesian Basin. Boreholes drilled from 1879 at Killara homestead in north-western New South Wales, at Anna Creek in South Australia and in Queensland at Thuralgoonie and Barcaldine, substantiated this theory. Since then, the waters of the basin have been a major asset to the pastoral industry. Supplies of groundwater have also been essential to the development of the mining industry in remote areas. At Tennant Creek in the Northern Territory, almost all water is drawn from unconsolidated sediments; the Pilbara iron mines in Western Australia depend heavily on water from the alluvium of the Fortescue, de Grey and Yule Rivers; and near Townsville in northern Queensland, groundwater is being used in the treatment of nickel ore from Greenvale. Many towns throughout Australia use groundwater for their domestic supply. One of the larger users is the Hunter District Water Board in New South Wales, which pumps approximately 9 x 10^6 cubic metres a year for general use from the Tomago coastal sands near Newcastle. Other towns using groundwater include Alice Springs in the Northern Territory, Naracoorte, Bordertown and Port Lincoln, South Australia, Geraldton, Bunbury, Carnarvon, Port Hedland and Albany in Western Australia. Despite improved conservation and management, full utilisation of surface water resources is within sight in many areas and, as population and standards of living increase, there will be continued pressure to further develop groundwater resources and to improve efficiency through conjunctive use of both ground and surface water resources.

Surface supplies

Distribution and volume. Permanent rivers and streams run in only a small part of the continent and only two-thirds of Australia is regarded as contributing to stream flow. There is practically no flow from the Western Plateau drainage division or from arid parts of other divisions. The total average annual discharge of Australian rivers has been assessed at 343 x 10^9 cubic metres. This figure comprises 158 x 10^9 cubic metres measured discharge and 185 x 10^9 cubic metres estimated for areas where there are generally no gauging records, and is small in comparison with river flows on other continents. In addition, there is a pronounced concentration of runoff in the summer months in northern Australia, whereas the southern part of the continent has a distinct, if somewhat less marked, winter maximum.

Variability of flow. Seasonal conditions are such that large rivers in the north carrying in excess of 30,000 cubic metres per second in high flood may cease to flow altogether in the dry season. Highest recorded annual discharges in many rivers such as the Murray and Burdekin are as much as 300 times the lowest. Even in areas of high rainfall, large variability in flow means that, for local regional development, most streams must be regulated by surface storage. However, in many areas of Australia, evaporation is so great that storage costs are high in terms of yield. Extreme floods, which can be expected over much of Australia, also add greatly to the cost of water storages, since the provision of adequate spillway capacity to ensure safety of the dam is often a major cost item. In some cases, such as the Fitzroy River in north Queensland, flood discharge in one week can exceed the average annual discharge. Dam sites are seldom available to enable such large volumes to be stored, so that rarely can major floods be conserved or controlled to any degree.

Potential development. Over 80 per cent of all water used in Australia is surface water. This quantity is about 14 x 10^9 cubic metres a year and represents about 11 per cent of the possible usable surface water available in Australia, and does not include the quantity diverted for hydro-electric power generation and other purposes which do not affect the quantity of water available. However, there are many factors which limit potential development to a fairly small fraction of the total runoff, including the great variability of river discharge, high evaporation and lack of sites for storage on many catchments. In the more favourable and more intensively populated south-east, development of surface water in some areas has already reached about 60 per cent of the total resources, which is considered to be close to the feasible limit. On the other hand, there is considerable scope for greater efficiency in water use and, as the cost of obtaining additional supplies increases, it can be expected that more effective use will be made of existing diversions.

Major dams and reservoirs

A map entitled *Australia—Dams and Storages*, published in 1975 by the Department of Minerals and Energy (now the Department of National Resources), shows the location, height of dam wall, capacity and purpose of Australia's major dams and water storages.

The table below lists existing major dams and reservoirs (in descending order of size), together with those under construction and those projected, at June 1975. The list is confined to dams and reservoirs with a capacity of 100 mil. cubic metres or more.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA

Name and year of completion	*Location*	*Gross capacity (mil. cubic metres)(a)*	*Height of wall (metres) (b)*	*Remarks*
		EXISTING DAMS AND RESERVOIRS		
Lakes Gordon and Pedder— (1974)				
Gordon	Gordon River	11,671	140	Storages for Gordon River hydro-electric power station
Scotts Peak	Huon River	2,960	43	
Serpentine	Serpentine River		38	
Edgar	South-west Tasmania		17	
Ord (Lake Argyle) (1971)	Ord River, near Wyndham, Western Australia	5,720	99	For irrigation and flood mitigation (flood storage above spillway level 30,800 mil. cubic metres) and hydro-electric power generation at later stage.
Eucumbene (1958)	Eucumbene River, New South Wales	4,807	116	Part of Snowy Mountains Hydro-electric Scheme.
Eildon (1927, raised 1955)	Upper Goulburn River, Victoria	3,392	79	Storage for irrigation and hydro-electric power generation.
Hume (1936, raised 1961)	Murray River, near Albury, New South Wales	3,038	51	Part of Murray River Scheme: storage for domestic, stock and irrigation. Hydro-electric power station.
Miena (1967)	Great Lake, Tasmania	2,390	18	Storage for Poatina hydro-electric power station.
Warragamba (Lake Burragorang) (1960)	Warragamba River, New South Wales	2,057	137	For Sydney water supply. Hydro-electric power station.
Lake St Clair (1938)	Central Plateau, Tasmania	(c)2,000	3	Improved natural storage for eight Derwent river hydro-electric power stations.

For footnotes *see* end of table

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued*

Name and year of completion	*Location*	*Gross capacity (mil. cubic metres)(a)*	*Height of wall (metres) (b)*	*Remarks*
EXISTING DAMS AND RESERVOIRS—*continued*				
Menindee Lakes (1960)	Darling River, near Menindee, New South Wales	1,193	18	Part of Darling River water conservation Scheme. Provides additional storage for use under the River Murray Agreement.
Burrendong (1967)	Macquarie River, near Wellington, New South Wales	1,680	76	For conservation, flood mitigation, and rural water supplies.
Blowering (1968)	Tumut River, New South Wales	1,628	112	Regulates discharges from Snowy Mountains Hydro-electric Scheme stations for irrigation. Hydro-electric power station.
Fairbairn (1972)	Nogoa River, Central Queensland	1,440	49	Storage for Emerald Irrigation Area.
Copeton (1976)	Gwydir River, New South Wales	1,364	113	Storage for irrigation.
Wyangala (1936, raised 1971)	Lachlan River, New South Wales	1,218	85	Storage for domestic, stock and irrigation purposes.
Burrinjuck (1927, raised 1956)	Murrumbidgee River, New South Wales	1,026	79	Storage for irrigation. Hydro-electric power station.
Talbingo (1971)	Tumut River, New South Wales	921	162	Part of Snowy Mountains Hydro-electric Scheme.
Somerset (1959)	Stanley River, Queensland	893	50	Brisbane–Ipswich water supply and flood mitigation. Hydro-electric power station.
Lake Echo (1956)	Lake Echo, Tasmania	725	19	Storage for Lake Echo, Tungatinah, Liapootah, Wayatinah and Lower Derwent hydro-electric power stations.
Jindabyne (1967)	Snowy River, New South Wales	688	72	Part of Snowy Mountains Hydro-electric Scheme.
Lake Victoria (1928)	Murray River, near South Australian border in New South Wales	680	..	Improved natural off-river storage; conserves supplies for South Australia.
Monduran (1975)	Kolan River, near Gin Gin, Queensland	586	52	Storage for irrigation.
Clark (Lake King William) (1949, raised 1966)	Derwent River, Tasmania	541	73	Storage for Tarraleah, Liapootah, Wayatinah and Lower Derwent hydro-electric power stations.
Arthurs Lake (1965)	Source of Lake River, near Great Lake, Tasmania	511	17	Part of Great Lake hydro-electric power development.
Keepit (1960)	Namoi River, near Gunnedah, N.S.W.	426	55	For conservation and irrigation. Hydro-electric power station.
Ross River (1974)	Near Townsville, Queensland	417	35	Flood mitigation and water supply to Townsville (first stage completed 1974, second stage under construction).
Waranga (1910)	Swamp, near Rushworth, Victoria	411	12	Off-river storage in Goulburn Valley for irrigation.
Tinaroo Falls (1958)	Barron River, North Queensland	407	47	Storage for Mareeba–Dimbulah Irrigation Area. Hydro-electricity generation.
Mokoan (1971)	Winton Swamp, near Benalla, Victoria	365	10	Storage for irrigation.
Glenbawn (1958)	Hunter River, near Scone, New South Wales	362	78	For conservation, irrigation and flood mitigation.
Rocklands (1953)	Glenelg River, Victoria	336	28	Part of Wimmera–Mallee domestic and stock water supply system.
Eppalock (1964)	Campaspe River, near Heathcote, Victoria	312	45	For irrigation and to supplement supply to Bendigo.
Cardinia (1973)	Cardinia Creek, near Emerald, Victoria	287	79	Part of Melbourne water supply storage.
Darwin River (1972)	Darwin River, Northern Territory	259	31	Darwin water supply augmentation.
Tantangara (1960)	Murrumbidgee River, New South Wales	254	45	Part of Snowy Mountains Hydro-electric Scheme.
Devils Gate (Lake Barrington) (1969)	Forth River, near Devonport, Tasmania	180	84	Mersey–Forth power development.
Avon (1927)	Avon River, New South Wales	214	72	Part of Sydney water supply storage.
South Dandalup River (1973)	Near Mandurah, Western Australia	208	41	Storage for Perth water supply.
Upper Yarra (1957)	Yarra River, Victoria	207	89	Part of Melbourne water supply storage.
Wuruma (1968)	Nogo River, near Eidsvold, Queensland	194	46	Storage for irrigation.
Glenmaggie (1927, raised 1958)	Macalister River, Gippsland, Victoria	190	37	Storage for irrigation.
Wellington (1933, raised 1944 and 1960)	Collie River, Western Australia	185	37	For irrigation and domestic water supply.
Koombooloomba (1961)	Tully River, North Queensland	180	52	For hydro-electric and irrigation purposes.

For footnotes *see* end of table

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued*

Name	*Location*	*Gross capacity (mil. cubic metres)(a)*	*Height of wall (metres) (b)*	*Remarks*
EXISTING DAMS AND RESERVOIRS—*continued*				
Serpentine (1961)	Serpentine River, Western Australia	178	55	For Perth water supply.
Lake Brewster (1951)	Lachlan River, near Hillston, New South Wales	153	..	Storage of rural water supplies for lower Lachlan Valley.
Grahamstown (1969)	Grahamstown River, near Newcastle, New South Wales	153	12	Part of storage system for Newcastle and district water supply.
Cairn Curran (1956)	Loddon River, Victoria	149	44	Storage for irrigation.
Liddell (1968)	Gardiners Creek, Muswellbrook, N.S.W.	148	43	Cooling water for Liddell power station.
Eungella (1968)	Broken River, North Queensland	131	49	For cooling water and water supply at Collinsville and irrigation.
Rowallan (1967)	Mersey River, North Tasmania	131	43	Mersey-Forth hydro-electric power development.
Yarrawonga Weir (1939)	Murray River at Yarrawonga, Victoria	117	22	Diversion weir for irrigation.
Cethana (1971)	Forth River, near Devonport, Tasmania	109	110	Mersey-Forth power development.
Beardmore (1972)	Balonne River, near St George, Queensland	101	15	Storage for irrigation.
DAMS AND RESERVOIRS UNDER CONSTRUCTION				
Dartmouth	Mitta Mitta River, Victoria	4,000	180	Additional regulation under River Murray Agreement, hydro-electric power station.
Glenlyon	Pike Creek, near Stanthorpe, Queensland	261	46	Storage of irrigation waters for Border Rivers Scheme.
North Pine	North Pine River, near Petrie, Queensland	205	44	To supplement supply to north Brisbane area.
Tallowa (Lake Yarrunga)	Shoalhaven River and Kangaroo River Junction, New South Wales	135	43	Sydney water supply and pumped storage power development.
Julius	Leichhardt River, near Mount Isa, Queensland	123	35	Water supply to Mount Isa mines, city and other mining development.
Googong	Queanbeyan River, New South Wales	119	59	For Canberra water supply.
DAMS AND RESERVOIRS PROJECTED				
Wivenhoe	Brisbane River, near Fernvale, Queensland	1,150	58	Water supply and flood mitigation for Brisbane, hydro-electric.
Thomson	Thomson River, near Erica, Victoria	1,110	160	For Melbourne and Gippsland water supply and irrigation storage.
Mackintosh	Mackintosh River, Tullibardine River, near Queenstown, Tasmania	922	74 25	Storage for Pieman hydro-electric power development.
Pieman	Pieman River, Tasmania	641	120	Storage for Pieman hydroelectric power development.
Split Rock	Manilla River in Namoi Valley, New South Wales	370	64	Storage for irrigation.
Windamere	Cudgegong River, near Mudgee, New South Wales	353	69	Storage for irrigation.
Gunpowder	Gunpowder Creek, near Mount Isa, Queensland	141	44	Mining water supply.
Spencer	Denison Creek, near Nebo, Queensland	127	24	Mining water supply.
Bastyan (Lake Rosebery)	Pieman River, Tasmania	124	75	Storage for Pieman hydro-electric power development.

(*a*) Includes 'dead water', i.e., water below the operational outlet of the reservoir. (*b*) As a general rule, the figures shown for height of wall (metres) refer to the vertical distance measured from the lowest point of the general foundations to the 'crest' of the dam, i.e., the level of the roadway or walkway on the dam. (*c*) Estimated.

Irrigation

For some brief remarks on the history of irrigation in Australia *see* issues of the Year Book prior to No. 39. An article on the conservation and use of water in Australia appeared in Year Book No. 37, page 1096 and subsequent developments have been covered in later numbers of the Year Book.

Water resources research

Comprehensive programs of research and investigation are being pursued by State water and agricultural authorities, the Commonwealth Scientific and Industrial Research Organization and the Australian Water Resources Council often in collaboration. Special attention is being given to the following: high water tables due to the application of water; surface accumulation of salt and other soil changes associated with irrigation; methods of applying water efficiently; soil treatments to improve the physical condition of irrigated heavy clay soils; the utilisation of irrigated pasture, by stock; and growth problems affecting plants and trees and reduction of salinity in river systems. The Melbourne and Metropolitan Board of Works, Melbourne's metropolitan water supply authority, is carrying out experiments in eucalypt forest areas to determine the short and long term effects of forest utilisation on streamflow quantity and quality.

The Commonwealth Scientific and Industrial Research Organization conducts a number of research stations and laboratories at locations throughout Australia. The Division of Irrigation Research at Griffith (New South Wales) is investigating ways of limiting the degradation of land by irrigation, improving the quality and range of irrigated crops, and assessing the amount of water required by irrigated crops and the most economical means of applying it. The crops being studied include citrus, maize, safflower, sorghum, sunflower and vegetables. This Division is also studying the effect on water quality of its use for irrigation, especially in regard to contamination by herbicides and fertiliser runoff. The Division of Environmental Mechanics at Canberra (Australian Capital Territory) studies the physics of infiltration and redistribution of water in both swelling and non-swelling soils, evaporation from field crops and forests, water movement and water stress in plants, and industrial effluent treatment by sedimentation and filtration. The Division of Land Resources Management is looking at the effect of clearing on the salinity of water from catchments in the southwest of Western Australia. Much of the work of the Division of Horticultural Research at Merbein (Victoria) is concerned with the problems of perennial horticultural crops grown under irrigation. Among other projects salt resistant rootstocks for grapevines and citrus are being evaluated, and the effects of salinity on the photo-synthetic performance and water use efficiency of horticultural crops are under investigation. The Division of Tropical Agronomy conducts research on a number of irrigated crops including grain legumes, grain sorghum, rice, and irrigated pastures at the Kimberley Research Station (Western Australia). The Division of Applied Geomechanics is developing techniques for the analysis of embankments of large earth and rockfill dams in order to improve design methods, and is studying the design of underground water tunnels.

The Irrigation Research and Extension Committee plays an important part in the agricultural activity of the Murrumbidgee Irrigation areas and associated districts, and the Coleambally Irrigation Area. It is representative of the New South Wales Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, the Rural Bank of New South Wales, the Soil Conservation Service of New South Wales, the Water Resources Commission of New South Wales, the Rice Marketing Board of New South Wales, the Wine Grapes Marketing Board of New South Wales, co-operative and secondary industries, and farmers' organisations. Finance is provided by these authorities on an agreed basis. The objectives are: to enable the agricultural extension services to the farmers in the defined sub-region to be continued and developed; to provide a system for advising on local agricultural policy and organisation; to provide means for farmer opinion to have due weight in the consideration of regional agricultural administration and policy; to achieve a unified approach to sub-regional extension in all branches of agriculture; to advise on the research needs of the sub-region and to co-ordinate the agricultural research of the various rural institutions working therein; and to achieve close liaison between research and extension.

Two other organisations with similar objectives are the Victorian Irrigation Research and Promotion Organisation which operates from Shepparton, and the Murray Research and Extension Committee centred at Deniliquin.

Preservation of catchments

Since water conservation commences on the catchments it is becoming increasingly recognised that anything which interferes with catchment efficiency affects the quantity of water available for all purposes. Active steps are being taken to counteract soil erosion, to conserve soil generally, and to minimise the effects of floods, overstocking, bush fires, and the destruction of vegetative cover. All States and the Commonwealth Government have initiated forestry policies which provide for reafforestation and the preservation of catchments. In recent years efforts to counteract soil erosion have been intensified, and there is some evidence of a more unified approach to catchment, water, forestry, and land use factors, which are regarded as parts of a single problem. This is exemplified in the multi-objective approach to planning now being adopted by some Australian authorities.

Water quality

Although some Australian rivers are naturally saline, the quality of surface water is generally good. However, most types of water pollution experienced in advanced industrial countries also occur in Australia. The main problems relate to sewage, industrial effluents and increasing salinity caused by agricultural activities.

In some parts of Australia untreated or inadequately-treated sewage and trade effluents are discharged into inland and coastal streams used for town water supplies. Mining activities cause pollution by the discharge of ore-processing wastes or mine water into streams or by leaching from waste dumps as in the Molonglo River in New South Wales where zinc is leached from tailings and slime dumps at Captains Flat. Remedial work at Captain's Flat is currently being undertaken to prevent further erosion and leaching of the waste dumps, and to minimise the flow of mine water discharging through springs into the Molonglo River.

Salinity affects two main areas of the country. In south-western Australia, clearing of the natural vegetation has been followed by a rise in watertable levels with consequent increase in discharge of groundwater to river flow. As the groundwater has a naturally high salt content, both the soil and surface water have been adversely affected. About four million hectares of land have been rendered sterile and difficult to till because of soil salinity, and the salt flow into surface storages for local urban water supplies is now a cause for concern.

In south-eastern Australia, salinity problems have caused concern over recent years in the Murray Valley where the salt content of the river is less than 30 milligrams per litre total dissolved solids in the upper reaches and increases progressively down-stream. At Waikerie in South Australia, it exceeded 600 milligrams per litre for much of the irrigation season during the 1967–68 drought. In the extensive irrigation areas of the middle reaches, continual additions to the groundwater from channel seepage and irrigation water cause the watertable to rise. As the sedimentary beds were laid down under a marine environment, the groundwater is saline and when drainage does return to the river, it carries large amounts of salt. It has been calculated that the Kerang area alone contributes, via Barr Creek, about 185,000 tonnes of salt per annum to the Murray, and all drainage in the upper sector of the river a total of 250,000 tonnes. An additional 500,000 tonnes of salt are estimated to enter the river annually as a result of groundwater inflow in the sector between the South Australian border and Morgan. Subsequent use of this water for irrigation has problems. Citrus growers in some areas have had to install under-tree sprinkler systems to prevent defoliation of trees caused by saline water from overhead sprinklers.

Groundwater supplies

Groundwater is more important than surface water in about 60 per cent of the country. Australia's estimated annual groundwater recharge is 72 x 10^9 cubic metres. Annual groundwater use is estimated at nearly 3 x 10^9 cubic metres or about 18 per cent of Australia's total water use.

An indication of the variability in quality and quantity of Australia's groundwater resources is given in the map sheets accompanying the Australian Water Resources Council's publication, *Groundwater Resources of Australia (1975).*

There are three main sources of groundwater.

(i) *Shallow unconsolidated sediments* which are found in the principal river and lake systems and as coastal dunes, deltas and narrow shoreline deposits. Since 1957 use has been made of the good-quality groundwater resources of the inland drainage systems of New South Wales, such as the alluvium of the Lachlan, Macquarie and Murrumbidgee Valleys. In central and western Australia good-quality water in unconsolidated sediment is rare because of lower rainfall and higher evaporation rates.

The coastal superficial reserves occur mainly in the better rainfall areas of the eastern part of the continent and of Tasmania and contain good-quality water. Since 1939 the Tomago Sands have been a source of water supply for Newcastle, approximately 9 million cubic metres a year being extracted since 1970—about 15 per cent of the total amount of water supplied by the Hunter District Water Board. In Queensland, the sugar industry has drawn on the extensive groundwater resources of the Burdekin Delta to such an extent, that it has become necessary to use surface water to recharge the aquifers artificially. In 1970, when 33,800 hectares of cane were under irrigation, with an estimated demand for 3,200 million cubic metres of water, some 350 million cubic metres of river water were pumped to artificially recharge.

(ii) *Sedimentary basins* which contain at least one major aquifer system. The Great Artesian Basin is the largest, occupying about 23 percent of the area of the continent and extending into South Australia, the Northern Territory, Queensland and New South Wales. In any one aquifer, the dissolved solids content of the waters is remarkably uniform. However, the high ratio of sodium to calcium and magnesium ions in water from the Great Artesian Basin can have an adverse effect on soil structure, rendering it impervious and making such groundwater unsuitable for irrigation purposes. Bores provide watering points for stock and domestic supplies over much of the basin and some 30,000 holes have been drilled, about 6,000 of which are still flowing. Between 1870 and 1970 the average annual bore discharge has been estimated at 600 million cubic metres of low salinity groundwater.

Marked reductions in flow prompted a series of interstate conferences on artesian water between 1912 and 1928. These stressed the need for controlled development and management of artesian water resources and resulted in the systematic collection and interpretation of data on Australian artesian basins. It is now considered that while many bores will ultimately cease to flow, others will assume a steady rate of flow, corresponding with the average recharge from rainfall absorbed by permeable outcrops. Diminution in flows from artesian bores has emphasised the need to eliminate wastage as much as possible. Licences issued for the construction of new artesian bores prohibit the distribution of water through drains and channels as formerly, and the supplies must be confined to the borehead or piped to appropriate watering points.

Other sedimentary basins providing water for stock and domestic purposes are: the Murray Basin covering 320,000 square kilometres in south-eastern Australia; the Daly, Georgina and Wiso Basins in the Northern Territory and Queensland; and the sedimentary rocks of the Carpentaria Province. Smaller basins in Western Australia, notably the Perth Basin, provide important domestic supplies for the more heavily populated parts of the State. Many of the larger towns, including Albany, Bunbury and Geraldton, and some major industries, depend entirely upon groundwater for their supplies. In Perth eleven per cent of the water supplied by the Metropolitan Water Supply, Sewerage and Drainage Board comes from groundwater (160 million cubic metres a year) and this proportion is expected to increase to 30–40 percent in the next decade.

Urban supplies are also obtained from the Amadeus Basin for Alice Springs; from numerous small basins in South Australia for Adelaide and Port Lincoln; and from the Otway and Gippsland Basins in Victoria. Sandstones of the Sydney Basin contain useful aquifers, but most of these basin sediments have a low hydraulic conductivity and contain saline groundwater.

(iii) *Fractured rocks* which are an important source of water particularly in the highlands of the south-eastern mainland and in Tasmania, parts of South Australia, central Australia, shield areas of Western Australia and the Kimberley Block. These aquifers usually yield relatively small supplies and quality may change rapidly over short distances. Generally, groundwater quality is good in northern and eastern Australia but poor over much of South Australia, the southern portion of the Northern Territory and the south-western part of Western Australia, where the low rainfall and high evaporation, coupled with low permeability, account for the variability and poor quality of the groundwater.

The quality of groundwater varies considerably and sources are subject to pollution in much the same way as surface supplies. Locally, groundwater has also been polluted by poor drilling techniques which allow contamination of fresh or lower salinity waters by more highly saline waters, and also by the discharge of industrial wastes into underground drainage bores. The Port Phillip Basin has the problem of discharge of industrial and domestic waste underground, and in the Western Port Basin there has been control of groundwater withdrawal since 1968 to prevent overdraft and salt-water intrusion.

PRINCIPAL WATER-BEARING BASINS IN AUSTRALIA

Name	*State*	*Geological age of chief aquifers*	*Approximate area*	*Depth to pressure water*
			square kilometres	metres
Great Artesian	Queensland, New South Wales, South Australia and Northern Territory	Mesozoic	1,751,480	Up to 2,130
Canning	Western Australia	Mesozoic-Palaeozoic	388,500	30 to 550
Murray	Victoria, New South Wales and South Australia	Miocene-Eocene	320,000	30 to 400
Georgina (including Barkly and Daly)	Northern Territory, Queensland	Cretaceous, Ordovician, Cambrian, and Upper Proterozoic	279,720	45 to 305
Eucla	Western Australia, South Australia	Pliocene-Miocene	191,660	90 to 610
Carnarvon	Western Australia	Cretaceous, Permian	116,550	60 to 1,220
Perth	Western Australia	Recent, Jurassic	54,390	60 to 760
Western District (Otway)	Victoria	Pleistocene-Upper Cretaceous	33,670	30 to 1,370
Basins of Ord-Victoria region	Northern Territory, Western Australia	Mainly Cambrian, and Permian	31,080	60 to 305
Pirie-Torrens	South Australia	Recent, Pleistocene	23,310	Up to 180
East Gippsland	Victoria	Pleistocene-Eocene	9,060	60 to 1,070
Adelaide	South Australia	Recent, Oligocene	2,850	60 to 180

Conjunctive use of surface and groundwaters

Although utilisation of water resources in most areas of Australia has in the past tended to concentrate on either ground or surface water sources it is becoming increasingly necessary to use all the water resources of a region in conjunction, even in some cases importing water from outside the region. This is known as conjunctive use. Such an approach generally makes more water available for use than would be the case with independent use of the various sources as best use is made of the benefits of each type of resource.

Most conjunctive use schemes or proposals involve ground and surface water with a surface storage constructed on the stream and in some cases provision for artificial recharge of aquifers located beneath or near the area of demand, although in many cases natural recharge facilities are adequate. A comparison of some of the advantages of ground and surface supply facilities is given below.

Surface Storage	*Groundwater Storage*
small capacity	large capacity
quick response	slow response
high capital cost	low capital cost
low operating cost (gravity supply)	high operating cost (requires pumping)
high evaporation losses	low evaporation losses.

It can be seen from this comparison that an ideal plan of utilisation of water resources in a new area consists of first developing groundwater resources due to their low capital cost (the cost of drilling and installing pumps as opposed to the cost of a major dam) and the later construction of a dam to increase the amount of water available for recharge of the groundwater storage and where appropriate for alternative supply by pumping from the river. Alternatively the surface storage can be utilised in periods when plenty of water is available and the groundwater supplies drawn on when the surface supply is unable to meet the demand. When water is again available (following say rainfall and recommencement or an increase in streamflow) use can then revert partly or wholly to the surface supply which the groundwater supply has recharged.

The advantages and disadvantages of each type of source of supply can be described in economic terms both for development and operation. Given a basic objective, such as minimum annual cost, analysis techniques exist to develop operating strategies that will achieve this objective in the best way, given the constraints that may apply such as minimum level of supply or of reliability.

The conjunctive use concept may be applied over a period of some years to allow the cost of development to match the amount of return from the development, or to allow smoothing out of long-term fluctuations in the weather pattern, or it may be applied over an annual timespan where strongly seasonal conditions make surface water available for only a few months of the year and reliable and adequate groundwater supplies are required for the remainder of the year. In Australia to date, the level of development of water resources has been such as not to require the development of a conjunctive use approach, but as the degree of overall development proceeds and as the value of water rises there is increasing pressure for greater amounts of water to be supplied at higher levels of reliability. In the Pilbara region of Western Australia design is proceeding on a major conjunctive use scheme to supply water to several mining towns to meet urban and industrial demands, both of which require a high level of reliability.

In this situation, with mean annual rainfall of 300 millimetres and annual potential reservoir evaporation of 3,000 millimetres, a real advantage in using groundwater supplies is that of avoiding a large surface reservoir in which high evaporation rates would lead to concentration of salts in the water to make it too brackish for use. A small dam will allow utilisation of surface water in periods when the river is flowing together with recharge of aquifers and utilisation of groundwater for the remainder of the time. In the Namoi Valley in New South Wales and the Callide Valley in Queensland, irrigation from groundwater sources is causing falls in the water table and investigations are being made into conjunctive operation of the ground and surface storages to enable the current development of these areas to meet current demands.

Often concomitant with conjunctive use is the development and operation of facilities for artificial recharge of the groundwater aquifers. In the Burdekin Delta in Queensland the first major artificial recharge scheme in Australia is operating and research and investigation is being conducted into problems relating to this scheme. In this particular situation the limiting factor presently is the rate of recharge and although strongly seasonal there is still adequate unregulated flow in the lower Burdekin River to meet the requirements of the recharge scheme.

Because of the requirement of extremely high reliability of supply of water for urban demands a number of Australian towns and cities are using or considering using ground and surface supplies in conjunction. At present the Western Australian town of Bunbury draws all its water from underground. With future growth of the town it is likely that its water demand will exceed the mean annual recharge of aquifers in its immediate vicinity. Although the nearby Preston River has a very seasonal flow, dropping to almost zero in summer, adequate supplies could be drawn from run-of-river during the winter months. This would leave demand on the aquifer only during summer, allowing recharge to take place over winter. Similar conditions exist in a number of other towns and cities in Australia.

Water management

Australia's water resources are managed by about 800 irrigation authorities, metropolitan water boards, local government councils and private individuals. State authorities dominate the assessment and control of water resources as, under the Commonwealth Constitution, primary responsibility for management of water rests with the individual State governments. The Commonwealth Government participates indirectly through financial assistance or directly in the co-ordination or operation of interstate projects through bodies such as the River Murray Commission and the Snowy Mountains Hydro-electric Authority.

The water field is an area of major public sector activity because the storage and distribution of water must take place on a large scale which usually involves costly projects. Investment in water, sewerage and irrigation facilities over the last ten years has tended to consume about 20 per cent of gross fixed capital expenditure by public authorities. Of this total expenditure, 10 per cent has been devoted to irrigation investment. In most cases major storages are intended to be multi-purpose although the pattern of river flow in Australia often makes it difficult to reconcile requirements for irrigation, hydro-electricity and flood mitigation. Increasing problems are being encountered in the provision of adequate supplies for the major cities, and moves for the development of additional catchments tend to conflict with rural requirements.

The proper management of water resources is essential to the maintenance of both quantity and quality of supplies and the ecological balance of the environment in general. Since water is an agent of erosion and deposition, the consequences of its misuse appear sooner than with non-dynamic resources, and with more urgent impact, as in erosion, flooding, siltation and pollution. Conversely, land management practices can interfere with catchment efficiency through overstocking, bushfires and the destruction of vegetation cover. All States and the Commonwealth Government have initiated forestry policies which reflect the strategic watershed location of the main Australian forest lands, upslope from urban centres and near areas of intensive agricultural land use.

In 1975, the Australian Water Resources Council adopted a statement of policy which sets out the basic principles and goals underlying the approach to the development and management of water resources in Australia. This policy states that the conservation and management of water resources must take place in the broad frame work not only of development and management of resources generally, but also of overall economic, environmental and social planning. A balanced approach to water resources management would include the following desirable goals:

(*a*) the provision of water supplies, adequate in quantity and quality—
    (i) to meet the needs of people throughout Australia;
    (ii) to meet the needs of, or to stimulate primary and secondary industry in such a way as to be compatible with projected market outlooks for the commodities concerned, and compatible with the resources and characteristics of the region concerned;

(*b*) the development and management of water resources so that where practicable and desirable, other purposes such as flood mitigation, power generation, recreation and wildlife conservation are achieved in parallel with the purposes referred to above;

(*c*) the development of waste water treatment facilities in conjunction with water supply systems and the encouragement of recycling and re-use where appropriate;

(*d*) the adoption of water pricing policies which enable water needs to be met at a fair and reasonable price, but which provide an incentive to all water users to avoid wasteful and environmentally harmful practices and which encourage the efficient allocation of resources;

(*e*) the continued development of policies and practices, as far as possible consistent throughout Australia, aimed at achieving appropriate water quality objectives, and the highest practicable level of pollution abatement;

(*f*) the adoption of the general principle that direct costs, or costs related to loss of amenity attributable to pollution, should be borne by the polluter. Although the immediate and full implementation of this principle may not be feasible, it is none-the-less a goal to be pursued;

(*g*) the zoning of flood-prone land, with a view to its orderly management;

(*h*) the maintenance of an adequate sample of undisturbed aquatic environments as reference areas and the preservation of appropriate wetlands for the benefit of native wildlife;
(*i*) implementation of a program of public education aimed at ensuring a proper understanding of the factors affecting the development and use of water resources and a sense of responsibility in these matters;
(*j*) the encouragement of an active interest and involvement of the community in the planning and management of water resources.

National and interstate aspects

In terms of the Commonwealth Constitution primary responsibility for control and conservation of water rests with the individual State governments. The Commonwealth Government is responsible for matters relating to water in its Territories. However, because political boundaries sometimes intersect river valleys and underground water basins, co-operation between governments has been necessary to develop resources in certain cases. Specific examples of Federal-State and interstate co-operation and approach are given in the following paragraphs.

Australian Water Resources Council

A widening awareness of the need for a co-ordinated Australian approach to water utilisation led to the formation in 1962 of the Australian Water Resources Council by joint action of the Commonwealth and State governments. The Council comprises the Commonwealth and State Ministers primarily responsibile for water resources, with the Commonwealth Minister for National Resources as Chairman, and is serviced by a Standing Committee consisting mainly of the heads of Departments responsible to these Ministers, and by three permanent technical committees with a number of supporting groups.

The primary objective of the council is the provision of a continuing comprehensive assessment of Australia's water resources, and the extension of measurement and research to provide a sound basis for the planning of future development. In terms of its objectives and functions, the council has dealt with a wide range of topics, making recommendations and stimulating action by appropriate bodies.

In recent years, the Council recognised that there was a need to provide a continuing inter-Government forum for discussion of views on water management matters as well as assessment, and in 1975 it agreed in principle to amend its objectives and functions to incorporate this role.

Following a recommendation by the council, the Commonwealth and State governments in 1964 adopted an accelerated program of surface and groundwater investigations to establish a comprehensive network of stream gauging stations and to improve knowledge of underground water resources. Besides implementing its own accelerated program in the Northern Territory, the Commonwealth Government has assisted State programs by making grants available over successive three-year periods. Nearly $16 million has been allocated to the States to assist in implementing programs over the three year period 1973–1976.

Since 1968 the Australian Water Resources Council has administered a Water Research Fund for which the Commonwealth Government has provided a total of $2.4 million. This research program is aimed at improving the efficiency of water management in Australia by complementing research already being undertaken by other agencies. Current research deals with such topics as: artificial recharge of groundwater, improvement of water sampling and analysis techniques, compilation of Australian water quality criteria and water use efficiency studies.

The Representative Basins Program, a joint Commonwealth-State government venture, was initiated in 1965 as a co-ordinated study of the hydrology of 93 catchments representative of the most typically-occurring complexes of climate, geology, landform, soils and vegetation in the Australian environment. Its aim is to collect and analyse data to improve our quantitative understanding of the water balance in Australian catchments with the following specific objectives:

(*a*) national water resources assessment, by improved interpolation between gauged catchments in the Australian stream gauging network;
(*b*) improved basis for design of engineering structures (dams and weirs, road and railway bridges and culverts) in ungauged catchments;
(*c*) prediction of the hydrologic effects of changes in land use and management; and
(*d*) provision of a bank of hydrological data which will be of fundamental importance to management, ecological and environmental studies.

In an attempt to collate available data on Australia's water resources, the following publications have been issued by the council.

A review of Australia's water resources (*Stream flow and underground resources*) 1963. *A review of Australia's water resources* (*monthly rainfall and evaporation*). (Bureau of Meteorology, 1969). *Water Resources Newsletter* (*bi-monthly*). *Hydrological Series* (listing results of Advisory Panel enquiries). *Technical Paper series* (listing results of research projects). *Inventory of water resources research in Australia* (published annually). *Stream gauging information* catalogue. *Groundwater resources of Australia. A review of Australia's Water Resources, 1975.*

Murray River

The Murray River and its tributaries form the largest river system in Australia. The catchment is approximately 1,057,000 square kilometres, or one-seventh of the area of the Australian continent, comprising five-sixths of New South Wales, over one-half of Victoria, one-sixth of Queensland and approximately one-fourteenth of South Australia. The Murray proper is 2,530 kilometres long. Its main tributaries are the Darling (1,390 kilometres) and the Upper Darling (1,140 kilometres, *see* page 27), the Murrumbidgee (about 1,550 kilometres), and the Goulburn (about 550 kilometres). The average annual flow of each of the chief contributory streams is as follows: Upper Murray, including the Mitta Mitta and Kiewa Rivers, 4,710 mil. cubic metres; Darling River, 3,480 mil. cubic metres; Goulburn River (including Broken River), 3,180 mil. cubic metres; Murrumbidgee River, 2,530 mil. cubic metres; and Ovens River, 1,560 mil. cubic metres. Irrigated production in the Murray River Basin is mainly grapes for wine, dried fruits, fresh fruits, rice, vegetables, dairy produce, wool, and fat lambs.

River Murray Waters Agreement. For a brief summary of historical events leading up to the River Murray Agreement (1915) by the Governments of the Commonwealth, New South Wales, Victoria and South Australia *see* issues of the Year Book prior to No. 39. Under the Agreement construction works are carried out by the States (which are also responsible for maintenance) subject to the approval and direction of the River Murray Commission. The Agreement provides that the minimum quantity of water to be allowed to pass for supply to South Australia in each year shall be sufficient to maintain certain specified flows in the lower river varying from 58.0 mil. cubic metres a month in the winter months to 165 mil. cubic metres a month in the four summer months of maximum demand—the total amounting to 1,547 mil. cubic metres over twelve months. The flow at Albury is shared equally by New South Wales and Victoria, and each of these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation. For a brief outline of the operation of the Agreement prior to 1949 *see* Year Book No. 40, page 1065, and earlier issues.

At a conference of Ministers held in 1949 to consider the diversion of the Snowy River it was decided that, by diversion of streams in the Snowy Mountains area, an average of approximately 543 mil. cubic metres per annum would be added to the Murray River (*see* Snowy Mountains Hydro-electric Scheme, page 873) and that increased storage should be provided in order to give additional regulation of the Murray River itself as well as to provide for regulation of the diverted waters. Hydro-electric potentialities would also affect the size of the storage.

The River Murray Commission investigated the position and subsequently recommended to the contracting Governments that the River Murray Waters Agreement be amended to provide for enlargement of the Hume Reservoir by 617 mil. cubic metres to approximately 3,038 mil. cubic metres. A conference of Ministers in 1954 agreed to the enlargement, and it was also agreed that the Commission should be given power to construct regulators and to carry out such other work on the Murray River between Tocumwal and Echuca as it considered necessary to reduce the losses from the regulated flow in that stretch of the river. The amended Agreement was ratified in the Parliaments of the Commonwealth and the three States and was proclaimed on 7 April 1955. In view of the proposed diversions by the Snowy Mountains Authority to and from the Murray River, and for other reasons, amendments to those sections of the River Murray Waters Agreement dealing with the distribution of the waters of the Murray were considered desirable. Following ministerial conferences, amendments were ratified by the four Parliaments concerned, and came into force on 6 November 1958.

Further amendment of the Agreement to provide for the construction of a storage of approximately 6,250 mil. cubic metres capacity at Chowilla in South Australia was ratified by legislation in the Commonwealth and State Parliaments and came into force on 30 April 1964. However, in view of the greatly increased costs by the time the project came to tender in 1967 and other significant factors (including water quality in the Lower Murray) which had arisen in the interim, the River Murray Commission resolved that, pending further investigations, construction of Chowilla Dam should be deferred. Further investigations then followed, including a re-assessment of the likely yield from both Chowilla and alternative storages on the Upper Murray and Mitta Mitta Rivers. Following careful consideration of this re-assessment, the River Murray Commission in February 1969 agreed that a 4,000 mil. cubic metres storage at Dartmouth on the Mitta Mitta River provided the greatest overall benefits in terms of cost and yield and should be the next development of the resources of the River Murray. The question of sharing the benefits could not be resolved by the Commission and was therefore referred to the respective Governments. Subsequently, Ministers representing the four Governments concerned met in March 1969 and agreed on conditions for the construction of the Dartmouth Project and for the sharing of the increased system yield between Victoria, New South Wales and South Australia. Among other things, the meeting of Ministers agreed to continue the Menindee Lakes Agreement in perpetuity.

The Commonwealth Government has offered to assist the three States with financing the project by way of a loan to the extent of 50 per cent of each State's contribution. At the same time it will make its own quarter contribution of the cost of the project.

The Acts ratifying the amendments to the River Murray Waters Agreement were proclaimed by the four contracting Governments on 30 March 1972, and work commenced on the construction of Darmouth Dam on 1 April 1972. By 30 June 1975, the Mitta Mitta River had been diverted around the dam site by a tunnel, and a contract had been let for the construction of the dam and spillway.

The first half of the 1974–75 year was characterised by wet conditions with heavy flooding of the main stream and the various tributaries, including the Ovens, Goulburn and Murrumbidgee. From November 1974, however, the weather conditions changed, and persistent dry weather led to high diversions for irrigation during the latter part of the season.

Salinity of River Murray waters, while satisfactory at upstream stations during the whole year, deteriorated with recession from the high flows and presented some problems in South Australia during February and March 1975. Following the drain-back of saline ground water, salinities in excess of 1,000 microsiemens per centimetre were recorded at Berri during the period from 12 February to 5 March 1975, and as a result, special arrangements were made to vary the South Australian entitlement during February and March so that additional flows to dilute the high salinities could be drawn from Lake Victoria. The arrangement envisaged a reduction in entitlement flows during the latter months of the year in order to compensate for the earlier over-draw. In the event, high flows from the Darling River eliminated any need for restriction in the South Australian entitlement.

At 1 July 1974, Hume Reservoir contained 72 per cent of its total capacity and, the combined active storage in Hume Reservoir, Menindee Lakes and Lake Victoria was 85 per cent of the total active storage available to the River Murray Commission. Menindee Lakes were full and Lake Victoria almost so. By 30 June 1975, Hume Reservoir contained 80 per cent of its total capacity, and the combined active storage was 90 per cent of the total active storage available to the Commission.

Of the total flow of the River Murray and its tributaries in the year 1974–75, 3,500 mil. cubic metres were diverted and impounded by the State of New South Wales and 2,530 mil. cubic metres by Victoria, while 396 mil. cubic metres were diverted by South Australia. During the year 2,810.0 mil. cubic metres were passed to South Australia. The total diversion for irrigation, town water and other purposes from the River Murray itself by New South Wales was 1,560 mil. cubic metres and by Victoria 1,540 mil. cubic metres.

River Murray Works. Dartmouth Dam when completed in 1977 will store 4,000 mil. cubic metres of water and will be the largest reservoir in the River Murray system. It will complement Hume Reservoir, situated just below the junction of the Murray and Mitta Mitta Rivers, which has a storage of 3,038.0 mil. cubic metres and forms a lake 20,190 hectares in area.

The Yarrawonga Diversion Weir, which was completed in 1939, raised the river level so that water could be diverted by gravitation into main channels constructed on either side of the river. Between the Yarrawonga Weir and the Murray mouth, thirteen weirs and locks have been built. Two flood diversion weirs have been constructed on the Murrumbidgee—one between Hay and the Lachlan junction and the other below the Lachlan junction.

The Mulwala Canal, supplied from the Yarrawonga Weir, has an off-take capacity of 85 cubic metres a second, serving 728,435 hectares of land in New South Wales. The Yarrawonga Channel, on the Victorian side, has an off-take capacity of 35 cubic metres a second, serving 121,406 hectares. Not all of this area is irrigated.

Menindee Lakes storage, situated on the Darling River some 480 kilometres upstream from its junction with the Murray River, has a total capacity of 1,794 mil. cubic metres and was constructed by the State of New South Wales. However under an agreement between the Commonwealth Government and the State Governments of New South Wales, Victoria and South Australia, storage in excess of certain New South Wales requirements is available for use under the River Murray Waters Agreement.

Adjoining the river in New South Wales, and 130 kilometres from the Murray-Darling junction, Lake Victoria storage, with a surface area of 11,198 hectares, was completed in 1928. The water released from Lake Victoria is used by the South Australian settlements. The inlet channel to Lake Victoria was enlarged in 1957 to permit greater diversion of periodical flood flows of short duration.

Five barrages across channels near the Murray River mouth connecting Lake Alexandrina with the sea were completed in 1940 to prevent ingress of salt water to Lakes Alexandrina and Albert and to the lower river, thereby increasing the productivity of adjacent lands. The structures maintain a sufficiently high level for 80 kilometres up river to permit watering by gravitation of a considerable area of reclaimed river flats. The total distance across the barrages and intervening islands is 24 kilometres.

In addition to the works carried out under the auspices of the Commission, the separate States have constructed thousands of kilometres of distribution channels and have provided a number of storages on the tributaries, thereby contributing materially to the large amount of irrigation development in the Murray Basin. The main storages are: New South Wales—Menindee Lakes Storage (Darling), Blowering (Tumut), Burrinjuck (Murrumbidgee), Copeton (Gwydir), Keepit (Namoi), Burrendong (Macquarie) and Wyangala (Lachlan); Victoria—Eildon (Goulburn), Waranga (Goulburn), Mokoan (Broken), Eppalock (Campaspe) and Cairn Curran (Loddon). Details of these, and other State works on Murray tributaries will be found in the sections dealing with State systems.

New South Wales–Queensland Border Rivers Agreement

The catchments for the border streams of New South Wales and Queensland (5,180 square kilometres) extend to the granite areas in the vicinity of Tenterfield (New South Wales) and Stanthorpe (Queensland), and elevation rises to 914 metres. Average rainfall is 762 millimetres. The catchments and the areas suitable for irrigation are approximately equal in each State. Climatic conditions are such that from April to October it is necessary to supplement rainfall by irrigation, to stabilise and increase production. The capacity of the area to grow lucerne and tobacco under irrigation has already been demonstrated. Other possible development of the area includes irrigation of cotton, root crops, cereals, and citrus fruit, and expansion of the fat stock industry.

The New South Wales–Queensland Border Rivers Agreement came into effect on 1 July 1947. The Agreement provided for the construction of certain works on those sections of the Severn, Dumaresq, Macintyre, and Barwon Rivers which constitute part of the boundary between New South Wales and Queensland, for the furtherance of water resources in those States.

The works to be constructed comprised a dam on the Dumaresq River at a site to be selected by the Border Rivers Commission to give a storage basin with a capacity as large as is reasonably practicable, and not less than six nor more than twelve weirs as may be found necessary to meet the requirements of irrigation along the rivers. Provision was also made for the construction of not more than four regulators in the effluents from the Border Rivers and for the taking over of the existing weirs on the Macintyre and Barwon Rivers at Goondiwindi and Mungindi respectively. The cost of these works and of administration are to be borne by the States in equal shares. The Agreement further provided that the water discharged from the Dumaresq storage, whether by regulated or unregulated flow, shall be available to the two States in equal shares.

After unfavourable foundation conditions were disclosed at several dam sites on the Dumaresq River, investigations were extended to tributary streams, and superficially suitable sites located on Pike Creek and the Mole River. A geophysical survey was made at each of these sites and preliminary comparative estimates were prepared to determine the relative economy of providing one large storage at Mingoola or two smaller storages on the tributaries. Following exploratory drilling of the tributary sites, a report dealing with alternative storage proposals and possible amendments to the existing Agreement was submitted to the participating States. Consequent upon these investigations an Amending Agreement was executed between the States of New South Wales and Queensland in November 1968, which included, *inter alia*, provision for the construction of storages on Pike Creek (Queensland) and the Mole River (New South Wales). The new agreement also provided for investigation and, subject to approval of the Governments, construction of further weirs on the Border Rivers, regulators on effluents of the Border Rivers, and works for the improvement of flow and of the distribution of flow in streams which intersect the New South Wales–Queensland border west of Mungindi.

Works completed under the original agreement include Bonshaw, Cunningham and Glenarbon Weirs on the Dumaresq River and a weir and regulator on the Barwon River at the off-take of the Boomi River.

Dam on Pike Creek. Early in 1972–73 the two States reached formal agreement that the dam (subsequently called Glenlyon Dam) be constructed to provide a gross storage capacity of 247 million cubic metres at an estimated cost of $14,000,000. The dam will consist of an earth and rock-fill embankment 61 metres high and 449 metres long at crest level, containing approximately 1,450,000 cubic metres of fill. Some 734,000 cubic metres of material will be excavated in open cut in the right bank, which will be lined with 4,400 cubic metres of concrete to form the spillway. At 30 June 1975, preliminary work including foundation stripping, curtain grouting, dental concreting and the diversion channel, 3.7 metres in diameter and 255 metres long and concrete lined, were completed. The 27 metres high coffer dam which will subsequently become part of the main embankment, was completed, and the base of the main embankment has been constructed to some 10 metres above bed level. The embankment was scheduled for completion by December 1975, and the associated concrete works by December 1976. Expenditure on the project to 30 June 1975 totalled $8,437,536.

Improvement of distribution of flow—Rivers crossing the border. During 1971–72 the two States considered proposals for the better distribution of flows in the Balonne–Culgoa River System. The proposals provide for the construction of four regulating structures, one in each stream immediately downstream of the four main bifurcations, namely, the Culgoa/Balonne Minor, the Balonne Minor/Donnegri Creek, the Ballandool/Bokhara and the Bokhara/Birrie bifurcations. Each structure consists of a steel sheet pile cut-off protected by concrete rock-fill upstream and concrete slab and rock-filled sausages and mattresses downstream. The works, estimated to cost $152,000, to be met equally by the two States were approved for construction in November 1972. All the works were completed by September 1974.

Snowy Mountains Hydro-electric Scheme

Following a comprehensive investigation into both the water and power potential of the Snowy River waters by a Technical Committee representative of the Commonwealth Government and the States of New South Wales and Victoria in 1947 and 1948, and the submission by the Committee of reports in 1948 and 1949, the Commonwealth Parliament passed the *Snowy Mountains Hydro-electric Power Act* 1949 setting up an Authority to implement the proposals agreed upon.

The basis of the proposals was to impound the Snowy River waters at high elevations and, by diverting them into tunnels passing under the Alps, to use their potential power for the generation of electricity and then to discharge them into the Murray and Murrumbidgee River systems for use in the irrigation areas.

The scheme involves two main diversions, that of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and that of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. In addition, works required to make use of the waters of the Upper Murrumbidgee, the Upper Tumut, the Upper Tooma and the Geehi Rivers for power generation also provide additional regulation of these streams, and this makes more water available for irrigation. Details of the two trans-mountain diversions and the associated power works together with details of progress and construction are given in Chapter 27, Electric Power Generation and Distribution.

The average total gain by diversion and regulation now that all storage works are completed is assessed at 1,382 million cubic metres per annum to the Murrumbidgee and 987 million cubic metres per annum to the Murray.

International aspects

International water organisations

Australia maintains contact with international bodies and United Nations agencies concerned with water resources and participates in their activities in various ways.

Organisation for Economic Co-operation and Development (OECD). Australian membership of the OECD since 1970 has involved participation in the work of the Water Management Group. The group is composed of senior government officials responsible in their own country for the management of water and is responsible to the Environment Committee. It has the role of investigating and rationalising problems which are the subject of international concern and developing stategies—economic, legal and technical—which might resolve them.

United Nations Educational, Scientific and Cultural Organization (UNESCO). The International Hydrological Decade (IHD) (1965–1974) was a period in which participating countries, including Australia, implemented an international program designed to advance the science and practice of hydrology. More research and improvement of basic data acquisition has been encouraged as well as education and training, exchange of information and regional and global co-operation. The Australian UNESCO Committee for the International Hydrological Decade collaborated with Commonwealth and State Government agencies, universities and other institutions concerned with hydrology on activities relevant to the IHD program. An international program in hydrology (IHP) has been commenced following the conclusion of the IHD. An Australian UNESCO Committee for the IHP (AUCIHP) has been formed to co-ordinate Australian input to the IHP.

World Meteorological Organization (WMO). Information on hydrology and meteorology is vital for water resources activities. WMO which has, *inter alia*, a Commission on Hydrology has recently strengthened its role in operational hydrology and its contact association with hydrological services. There is an advisory Committee on Operational Hydrology on which Australia is represented on behalf of the WMO Regional Association V. WMO has made a notable contribution to the IHD program with its published reports on about twenty WMO/IHD projects and will participate in the IHP. The Director of Meteorology is the permanent Australian representative on the WMO which meets every four years in congress. In Australia, hydrological activities and meteorological activities relative to water resources are co-ordinated by the Australian Water Resources Council, and the Secretary of the AWRC is the nominated hydrological advisor to the permanent representative.

Economic and Social Commission for Asia and the Pacific (*ESCAP*). ESCAP is one of several regional economic commissions set up by the United Nations under the Economic and Social Council. The Commission, through its Committee on Natural Resources, reviews and reports to the commission on a program of activities, largely of a technical nature but also including water policy issues. The program of activities is broadly concerned with the planning, management and development of water resources, including water resources planning of international rivers (e.g. the Mekong), measures for the mitigation of flood damage (so severe in this region) and the application of science and technology to the water field. By participation in this conference and in seminars arranged on selected topics, Australia contributes to, and benefits from, identification of the main problems of water resources management in a densely populated, developing region. A quarterly periodical, the *Water Resources Journal*, and a *Water Resources Series* publish the proceedings of conferences and seminars.

United Nations Environment Program (*UNEP*). A number of the recommendations of the UN Conference on the Human Environment held in Stockholm, June 1972 which forms part of the UNEP, relate to water (namely 51–55, 63 and 68). These involve Australian participation in a world registry of major rivers covering discharge and pollutants and of clean rivers so defined and in the development of methodology for analysis and planning of water resources management.

International Commission on Irrigation and Drainage (*ICID*). This commission was set up in India in 1950 so that the technical experience of all countries might be pooled for the benefit of all, and to promote the development and application of the science and technique of irrigation, drainage and flood control in their engineering, economic and social aspects. The commission consists of a National Committee from each participating country, and over sixty countries have so far been admitted to membership. Australia has been a member of ICID since 1952, and the National Committee consists of representatives of government departments, statutory authorities, firms and individuals actively interested in irrigation and drainage. Congresses of all member countries are held every three years. Publications include a bi-annual bulletin containing technical articles and discussion in the fields of irrigation and drainage.

United Nations World Water Conference. The Economic and Social Council (ECOSOC) of the United Nations is arranging a Water Conference under United Nations auspices, to be held in Argentina in March 1977. The conference is addressed to policy-making. It will consider how the global fixed stock of water can be best managed to satisfy the world's mounting requirements for water for domestic, agricultural and industrial use. Its primary objective is to promote the levels of preparedness needed locally, regionally, nationally and internationally if a water crisis is to be avoided in the next few decades.

Each country has been requested to form a national committee to co-ordinate input and assist in a report on its water resources and their management. In Australia the AWRC and AUCIHP together are functioning as a national committee and Australia will be participating fully in all aspects at the Conference.

STATES AND TERRITORIES

The foregoing text deals with water conservation and irrigation in Australia generally and with international, national and interstate aspects. The following survey covers the local pattern of water resources and the steps taken by the State Governments to bring about their development. In the various States, water policies tend to assume a distinctive and characteristic pattern closely allied with climatic conditions and specific local needs.

In Victoria almost every form of water scheme is in operation. In New South Wales major emphasis at present is on irrigation and stock development in the dry areas along the Murray and Murrumbidgee Rivers, though a substantial scheme of intensive irrigation is being conducted in the Murrumbidgee Irrigation Area. In Queensland, up to the present, the predominant emphasis has fallen on water (mainly underground sources) for stock, and the development of small irrigation schemes in sub-humid and humid areas, principally to stabilise production of such crops as tobacco, sugar, cotton and pastures. Apart from regular irrigation practices along the Murray River, South Australian authorities are vitally concerned with reticulated supplies for rural areas and towns. Western Australia has developed unique rock catchments and piped supplies for agricultural areas and towns in dry districts. Tasmanian interest relates almost exclusively to hydro-electric generation. The Northern Territory is concerned primarily with water supplies for population centres and mining and pastoral industries.

New South Wales

Administration

The Water Resources Commission of New South Wales (formerly the Water Conservation and Irrigation Commission) consists of three commissioners appointed by the Governor. The operations of the Commission cover water conservation, control of irrigation areas, the establishment, operation and maintenance of works for domestic and stock water supply, irrigation districts, flood control districts, sub-soil drainage districts, constitution of water trusts, the issue of licences for private irrigation, artesian and shallow boring, assistance under the provisions of the farm water supplies scheme, and river improvement works.

Under the Water Act, 1912–1955 the right to the use and flow, and the control of water in all rivers and lakes which flow through, or past, or are situated within, the land of two or more occupiers, is vested in the Commission for the benefit of the Crown. A system of licences operates for the protection of private works of water conservation, irrigation, water supply, drainage and prevention of inundation.

For particulars of the New South Wales–Queensland Border Rivers Agreement ratified by Acts of both States in 1947, *see* page 872 of this chapter.

Schemes summarised

The bulk of irrigated land is along the Murray and its tributary the Murrumbidgee. Smaller areas are served by the Wyangala Dam, Lake Cargelligo and Lake Brewster on the Lachlan (a tributary of the Murrumbidgee), by Glenbawn Dam on the Hunter River, by Keepit Dam on the Namoi River, by Burrendong Dam on the Macquarie River, by the Menindee Lakes Storage on the Darling River and by Copeton Dam on the Gwydir River. None of the other rivers is regulated by large head storages, though weirs and dams have been provided for town supplies, etc. in many places. In addition, substantial use is made of artesian and sub-artesian water in pastoral areas.

New South Wales legislation provides for the constitution and control of various schemes having different characteristics and including irrigation areas, irrigation districts, water trust districts, flood control and irrigation districts, and river improvement districts. There are nine irrigation areas, although two of these, Yanco and Mirrool, are generally described under the one heading, namely, the Murrumbidgee Irrigation Area. The Areas are: The Murrumbidgee Irrigation Area, consisting of 182,620 hectares served with water through a channel system stemming from the river at Berembed Weir; the Coomealla Irrigation Area of 14,013 hectares, served by pumping from the Murray; the Curlwaa Irrigation Area of 4,204 hectares, supplied from the Murray by pumping; the Hay Irrigation Area of 2,772 hectares, supplied with water pumped from the Murrumbidgee; the Tullakool Irrigation Area of 7,287 hectares, supplied from the Edward River by diversion at Stevens Weir; the Buronga (3,537 hectares) and Mallee Cliffs (769 hectares) Irrigation Areas, served by pumping from the Murray; and the Coleambally Irrigation Area (94,954 hectares), served by diversion from the Murrumbidgee River. All these Areas are administered by the Commission.

The capacities of the main storages for irrigation in New South Wales (in million cubic metres) are:

Darling—Menindee Lakes Storages (1,793); Severn–Pindari Dam (37.5);

Murray—Half share of Hume Reservior, weirs and locks to Wentworth (1,667); Paterson–Lostock Dam (20.2); Edwards River, Stevens Weir (8.8);

Tumut (tributary of Murrumbidgee)—Blowering Dam (1,628);

Macquarie—Burrendong Dam (1,189.0 irrigation storage; 489.0 flood mitigation storage);

Murrumbidgee—Burrinjuck Dam (1,036); Redbank Weir (9.1); Maude Weir (8.3);

Namoi—Keepit Dam (426.0);

Lachlan—Wyangala Dam (1,218); Lake Brewster (152.8); Lake Cargelligo (35.9);

Hunter—Glenbawn Dam (228.6 irrigation storage; 133.1 flood mitigation storage);

Belubula (tributary of Lachlan River)—Carcoar Dam (36.1);

Gwydir—Copeton Dam (1,364.0).

The total length of supply channels, drains, escape channels and pipe lines constructed by the Water Resources Commission in New South Wales is 8,490 kilometres. This comprises 5,772 kilometres of supply channels (including main canals), 2,607 kilometres of drains and escape channels, and 111 kilometres of pipe lines.

Irrigated culture

The following table shows details of the area of crops and pasture and the methods employed on land under irrigated culture during the 1974–75 season.

AREA OF LAND UNDER IRRIGATED CULTURE: NEW SOUTH WALES, 1974-75

(Hectares)

	Method of irrigation					
Crop	*Spray*	*Furrow*	*Flood*	*Trickle*	*Multiple Methods*	*Total Area*
Sown and native pastures . . .	40,942	3,757	237,387	..	2,311	284,397
Lucerne . . .	26,835	439	17,665	..	624	45,563
Cereals for all purposes	15,959	17,033	106,827	..	782	140,601
Cotton	..	24,165	4,721	..	..	28,886
Sunflower . . .	561	871	3,364	..	92	4,888
Tobacco . . .	808	162	8	..	..	978
Linseed . . .	121	526	166	..	..	813
Safflower . . .	9	35	40	..	..	84
Vegetables for human consumption . .	11,575	2,139	491	81	205	14,491
Fruit	6,667	5,533	602	575	305	13,682
Grapevines . . .	1,168	6,114	636	1,382	101	9,401
All other crops . .	2,153	6,863	2,074	12	113	11,215
Total . .	**106,798**	**67,637**	**373,981**	**2,050**	**4,533**	**554,999**

Irrigation areas

Murrumbidgee. This area, which consists of Yanco and Mirrool Irrigation Area, together with adjacent lands supplied under agreement, received 488.9 mil. cubic metres, nearly 14 per cent of the total water (4,068.0 mil. cubic metres) used within the State for stock, domestic and irrigation purposes. The area is served by the Burrinjuck Dam on the Murrumbidgee River and Blowering Dam on the Tumut River, which joins the Murrumbidgee River near Gundagai. The catchment of the Burrinjuck Dam is about 12,950 square kilometres and water storage in Blowering Dam is from the natural flow of the Tumut River and water released into that river from the Snowy-Tumut Development Section of the Snowy Mountains Hydro-electric Scheme. This includes water from the Eucumbene, Upper Murrumbidgee, Tooma and Upper Tumut Rivers. The dams also provide town supplies for Gundagai, Wagga, Narrandera, Hay, Balranald, and for towns served by the South-West Tablelands scheme.

Domestic and stock water and water for irrigation are supplied to the Irrigation Districts of Tabbita, Benerembah and Wah Wah, and the Flood Control and Irrigation District of Lowbidgee. Flood flows are relied on to serve the Lowbidgee district, and water is not released from the dams for that purpose. For other areas and districts, however, water is stored during the winter, fed by melting snows and spring freshets, and is released during the September-May irrigation season. To supply the Yanco and Mirrool Areas, water is diverted by Berembed Weir into the main canal which has an off-take capacity of 45 cubic metres a second. The main canal has been completed to beyond Griffith, a distance of approximately 154 kilometres. These areas are served by approximately 1,283 kilometres of supply channels and pipes and 1,416 kilometres of drainage channels. In addition, approximately 715 kilometres of supply channel run through the Tabbita, Benerembah and Wah Wah Districts which are adjacent to the Areas.

The Water Resources Commission controls land transactions and water supplies for the Murrumbidgee Irrigation Areas only, and has no jurisdiction over land transactions in the adjacent irrigation districts, although it is responsible for the operation and maintenance of the water supply in these areas. Other local government services, including electricity and town water supply, are provided by Councils. Land is disposed of by the Commission by purchase or under perpetual lease tenure or leased for short terms for grazing or cultivation. The area under occupation at 30 June 1976 was 176,524 hectares including 12,073 hectares held for short lease grazing, agriculture, etc.

The land on which the Murrumbidgee Irrigation Areas and associated districts are situated originally comprised large sheep stations and was sparsely populated, but at 30 June 1974 its population was approximately 30,780, that of Leeton Shire being 11,510 and that of Wade Shire 19,270. The principal products of the Murrumbidgee Irrigation Areas are wool, livestock for slaughtering, rice, citrus fruits, peaches and nectarines, grapes, tomatoes, peas, beans, and root vegetables. Rice growing was initiated in the M.I.A. in 1924 and has since become the most important crop. In a normal season, the water supplied for rice represents about half the total delivered to the Area.

Other Irrigation Areas. The Coomealla, Tullakool, Buronga, Mallee Cliffs, Hay, Curlwaa, and Coleambally Irrigation Areas follow the same administrative pattern as the Murrumbidgee Area—that is, land transactions are administered by the Water Resources Commission which is responsible also for the operation and maintenance of works to supply water.

Irrigation districts

These districts are set up under the Water Act, 1912–1955 for (*a*) domestic and stock water supply and (*b*) irrigation. The essential difference between an 'Area' and a 'District' is that in the case of the former, all the land to be included in the area is acquired by the Crown and then subdivided into such number of separate holdings as may be determined. Within the District, however, existing ownership of land is not disturbed other than to acquire land required for water distribution works.

Since the completion of the Hume Reservoir, several such districts have been established along the Murray to utilise the New South Wales share of the storage. Water is not available for the whole of the 2,023,430 hectares adjacent to the Murray in New South Wales, and therefore the schemes are based on 'extensive' irrigation, that is, water rights are allotted to holdings on the basis that only a portion of each holding (one hectare in three, five or ten, according to the district, etc.)will be irrigated but additional water, when available, may be obtained by landholders. 'Water right' means right to such a quantity annually of water, 100mm deep, as will cover an area of 1 hectare.

Water to serve Berriquin, Deniboota and Denimein Districts is diverted from the Murray River at Yarrawonga into the Mulwala Canal. Water for the Wakool Irrigation District and the Tullakool Irrigation Area is diverted from the Edward River at Stevens Weir, and a supplementary supply is also obtainable from Mulwala Canal. The total length of completed canals and channels in Berriquin District is 1,682 kilometres, comprising Mulwala Canal 121 kilometres, Berrigan Channel 35 kilometres, subsidiary channels 1,326 kilometres, escape channels 183 kilometres, and cross drainage channels 16 kilometres. Off-take capacity of the Mulwala Canal is 6.2 mil. cubic metres a day. Wakool, with 692 kilometres of channels, contains 328 holdings, and the area developed by irrigation includes about one hectare in six of the total area. Sheep raising and rice growing are the main industries. Considerable subdivision has occurred within the Berriquin District, and the proportion of the total area developed for irrigation is higher than in the case of Wakool. Sheep (including fat lambs), dairying, wheat, and rice growing are the main industries.

Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts

The Irrigation Act, 1912–1966 provides for the constitution of Trust Districts for domestic and stock water and irrigation, and empowers the Commission to construct, acquire or utilise necessary works. When the works are completed, they are handed over to trustees to administer. The trustees are elected by the occupiers of the land and act with a representative of the Commission. They are empowered to levy and collect rates covering the cost of the works repayable to the Crown by instalments and also the cost of operation and maintenance of the works. The rates are struck according to the area of land which benefits. The following are the water trusts, other than irrigation, as at present constituted (the area in hectares of each district being shown in parenthesis): *Murray River*—Little Merran Creek (63,714), Bullatale Creek (27,648), Poon Boon (13,881), Minnie Bend Flood Prevention (886); *Murrumbidgee River*—Yanco, Colombo and Billabong Creeks (407,834); *Lachlan River*—Marrowie Creek (118,427), Torriganny, Muggabah and Merrimajeel Creeks (68,894), Micabil Weir (4,654), Condobolin West Weir (1,813); *Miscellaneous*—Great Anabranch of Darling River (388,168), Nidgery Weir (18,972), Algudgerie Creek (3,758), and Boomi River (105,230)—making in all a total area of 1,223,879 hectares. Twelve of these trusts have been formed for the provision of water for domestic and stock purposes and one for flood prevention.

Irrigation Trusts are established under the same Act and are administered by trustees in a similar way. There are seven of these trusts.

The Lowbidgee Provisional Flood Control and Irrigation District, the first of its kind, was constituted in 1945. Its purpose is to provide flood irrigation for pasture lands on the lower Murrumbidgee by water diverted from the Maude and Redbank Weirs. Another district, Medgun, near Moree in the north-west, is also in operation.

River, lake and farm water supplies

During recent years the number of licences and permits issued to individuals to draw water from rivers and lakes for irrigation has increased substantially, especially along the coastal streams in sub-humid districts where the value of supplementary irrigation is becoming more recognised as a means of stabilising production in dry months. There has also been a considerable increase along the Murrumbidgee, Lachlan, Namoi, and Macquarie Rivers.

Under the Farm Water Supplies Act, 1946, technical advice and assistance, and also financial assistance, are made available to help individual farmers and groups of farmers to provide and improve water supplies for domestic, stock and irrigation purposes by means of wells, bores, excavated tanks, weirs or dams, and flood and spray irrigation systems.

Underground water

For information on underground water resources in New South Wales *see* Year Book No. 55 and earlier issues.

Future program

The program of development in hand includes the provision of additional dams, storages, weirs, flood mitigation and drainage schemes and stream clearing works. Copeton Dam on the Gwydir River was completed in 1976 and Brogo Dam on the Brogo River, Chaffey Dam on the Peel River, Windamere Dam on the Cudgegong River, Cudal Dam on Boree Creek and Split Rock Dam on the Manilla River have either been commenced or authorised for early construction. An ongoing program of investigations is being carried out to identify desirable additional projects which should be considered for implementation as funds become available. Increasing attention is being given to efficiency of water use and economic, social and environmental factors in water management policies.

Victoria

Administration

Victorian Governments have been active in the development of country water supplies since the 1860's when major works to supply the Bendigo goldfields were undertaken. Local trusts to construct and operate waterworks under Government supervision were provided for in the *Water Conservation Act* 1881. Development under the trust system was greatly stimulated by the *Irrigation Act* 1886, which provided for the construction of national headworks by the State, and vested in the Crown the right to the use and control of all surface waters. By 1900 there were 33 irrigation trusts and 18 other rural water supply trusts, but the system of local control was then breaking down under financial difficulties.

The *Water Act* 1905 established the State Rivers and Water Supply Commission to take over the Irrigation Trust districts (except the still-existing First Mildura Irrigation Trust) and to exercise the State's functions in the further control and development of surface waters outside the metropolis. The Commission now supervises all private diversions from streams and directly administers irrigation districts covering 917,580 hectares, rural waterworks and urban districts covering 4,867,192 hectares, flood protection districts covering 60,236 hectares and urban water supplies serving 332,142 people. It also supervises the activities of local urban water supply authorities supplying 712,750 people in 313 towns, as well as 117 local sewerage authorities and 34 river improvement and drainage authorities.

Works summarised

Since the State Rivers and Water Supply Commission began its operations in 1906 the capacity of storages under its control has been increased from 212.2 mil. cubic metres to 6,221.7 mil. cubic metres. In addition, Victoria has in effect a half share in River Murray Commission storages totalling 1,667.1 mil. cubic metres, bringing total capacity available to Victoria at 30 June 1975, to 7,888.8 mil. cubic metres. Most of the water used from these storages is for irrigation. The area irrigated in 1974–75 totalled 583,402 hectares (compared with 42,490 hectares in 1906). Irrigation deliveries in 1974–75 totalled 2,713.9 mil. cubic metres. The value of irrigation production in 1973–74 was estimated at $257,340,000. Irrigation deliveries for that year totalled 2,713.8 mil. cubic metres. Of the total irrigation production about one-quarter was from lands irrigated by 'private diverters', i.e. irrigators who are authorised to take water from streams, lakes, etc., but who do not come within the boundaries of an irrigation district.

Storages

Capacities of principal storages (in mil. cubic metres) and system totals at 30 June 1975 were as follows:

Goulburn System—Eildon, 3,390.1; Waranga, 411.2; total, 3,862.1.
Murray System—half share of Murray storages, 1,667.1; total, 1,667.1.
Broken River System—Nillahcootie, 39.8; Mokoan, 364.8; total, 404.6.
Ovens System—Lake Buffalo, 24.1; Lake William Hovell, 12.3; total, 36.4.
Loddon System—Cairn Curran, 148.8; Tullaroop, 74.1; Laanecoorie, 7.7; total, 230.7.
Campaspe–Coliban System—Eppalock, 311.9; Coliban storages, 80.1; total, 392.0.
Wimmera–Mallee Systems—Rocklands, 335.5; Toolondo, 106.6; Bellfield, 78.5; total, 775.1.
Maffra–Sale System—Glenmaggie, 190.3; total, 190.4.
Werribee–Bacchus Marsh—total, 60.2.
Mornington Peninsula—total, 59.3.

Irrigated culture

The following table shows details of the area of crops and pasture and the methods employed on land under irrigated culture during the 1974–1975 season.

AREA OF LAND UNDER IRRIGATED CULTURE: VICTORIA, 1974-75
(Hectares)

Crop	*Method of irrigation*					
	Spray	*Furrow*	*Flood*	*Trickle*	*Multiple Methods*	*Total Area*
Sown and native pastures	24,577	12,274	461,094	2,037	3,666	503,648
Lucerne	4,932	266	8,140	28	127	13,493
Cereals for all purposes	1,264	256	5,938	87	112	7,657
Tobacco	3,596	18	29	. .	26	3,669
Vegetables for human consumption	14,098	1,792	744	53	288	16,975
Fruit	5,458	2,342	6,052	2,034	762	16,648
Grapevines	2,354	12,881	1,122	189	137	16,683
All other crops	1,727	244	2,601	9	48	4,629
Total	**58,006**	**30,073**	**485,720**	**4,437**	**5,166**	**583,402**

Irrigation systems

Goulburn–Campaspe–Loddon. The principle storage for Goulburn waters is Lake Eildon, which was completed in 1956, submerging the original 377.5 mil. cubic metres Eildon storage completed in 1927. For the distribution of additional supplies available from Eildon and from other new storages on the Loddon and Campaspe rivers it has been necessary to undertake major enlargements in the distribution system by a long-term program of channel works which is still in progress. Deliveries of Goulburn–Campaspe–Loddon water during the 1954–55 Irrigation Season totalled 487.0 mil. cubic metres. This was near a record for annual deliveries at this time. The enlargement of Lake Eildon, and later storage and distribution developments, led to much higher delivery levels. Record deliveries of 1,310.7 mil. cubic metres were recorded in 1972–73. Deliveries during 1973–74 amounted to only 764.9 mil. cubic metres, owing to the fact that above average rains reduced demands.

Goulburn River water is diverted to the irrigation areas by gravitation from the pool formed by the Goulburn Weir, near Nagambie, completed in 1890 as a State work. The East Goulburn Main Channel, with a capacity of 2.5 mil. cubic metres per day, supplies the area around Shepparton. Two channels, each of 3.7 mil. cubic metres per day capacity, to the west, convey water to the off-river Waranga Reservoir, and supply part of the Rodney area through off-takes on the way. From Waranga Reservoir there are two main outlets, one supplying the western part of the Rodney area and the other, of 2.9 mil. cubic metres per day capacity, supplying the Waranga Western Main Channel, which runs 370 kilometres west across the Campaspe and Loddon Valleys to beyond Birchip.

Flows in the Waranga Western Main Channel are augmented by the injection of Campaspe water through a pumping station of 0.5 mil. cubic metres per day capacity near Rochester. Supply to the Tragowel and Boort areas is augmented by gravitational diversion of Loddon water.

The gross area of holdings in the Goulburn–Campaspe–Loddon systems is 543,523 hectares. The main products are dairy produce, fruit, wool, and fat lambs. Annual production of deciduous canning fruits in the eastern part of the system is about two-thirds of Australia's total.

Murray River System. Water is diverted from the Murray by gravity at the Yarrawonga Weir for the Murray Valley Irrigation Area and at the Torrumbarry Weir for the Torrumbarry irrigation system which extends to Swan Hill. Holdings in the Murray Valley area total 121,952 hectares, devoted mainly to dairying, fat lambs and canning fruit. Holdings in the Torrumbarry system total 161,950 hectares, devoted mainly to dairying and the production of fat lambs, with a concentration of vineyards, orchards and market gardens around Swan Hill.

Downstream from Swan Hill there are 5 districts supplied by pumping: the district of the First Mildura Irrigation Trust and the 4 Commission districts of Nyah, Robinvale, Red Cliffs and Merbein. These districts together serve 30,281 hectares, producing mainly dried vine fruits, with some citrus fruits and table and wine grapes.

Southern systems. The Maffra–Sale–Central Gippsland district, covering 52,800 hectares around Maffra and Sale, is supplied from the Macalister River, regulated by Lake Glenmaggie, and from the unregulated flow of the Thomson River. Dairy Farming is the principal activity. The Bacchus Marsh and Werribee District, supplied from storages in the Werribee River only 32 kilometres west of Melbourne, covers 6,420 hectares intensively developed for dairying and vegetables.

Wimmera–Mallee domestic and stock supply system

Storages in the Grampians in south-west Victoria ensure farm water supplies over an area of 25,000 square kilometres extending northward through riverless pastoral and cereal lands to the Murray. Farm dams throughout this region, which covers one-eighth of the total area of the State, are filled once each year, in the winter-spring season, through the medium of 10,600 kilometres of Commission channels and about 6,400 kilometres of private channels. Without this supply, occupation of the region would be extremely hazardous. Storage capacity has now been increased from 696.6 mil. cubic metres to 775.1 mil. cubic metres by construction of Lake Bellfield. Fifty towns, with a population of 46,000, receive their supply from the same system. Near Horsham and Murtoa, close to headworks in the south, a supply is maintained for the irrigation of an area of 3,030 hectares, mainly for dairying.

Drainage, flood protection and river improvement

The largest work in this category undertaken by the State Rivers and Water Supply Commission is the Koo-wee-rup–Cardinia flood protection district embracing 36,117 hectares of a continuous depression along the seaboard of Westernport. Once useless, indeed a hindrance to communication, this area now yields primary products worth several million dollars each year.

By the *River Improvement Act* 1948, the formation of local river improvement and drainage trusts under the supervision of the Commission has been greatly facilitated and since 1950, 32 such trusts have been formed (including the Dandenong Valley Authority). The importance of river improvement work is expected to continue to grow.

The Dandenong Valley Authority was created in 1963 by special legislation, with jurisdiction over the whole catchment of the Dandenong Creek (777 square kilometres) for purposes of arterial drainage, river improvement and flood protection. In June 1966 the Authority took over the Commission's Carrum Drainage District.

Finance

The net capital liability of the Commission at 30 June 1975 for works under its direct control was $383.1 million. Eighty-five per cent of the cost of capital and interest repayments was borne by the State. Total expenditure on irrigation was $196.4 million; $33.3 million on rural, domestic and stock supplies; $60.0 million on urban supplies and $2.9 million on flood protection. A further $45.3 million (relating mainly to irrigation) was expended on headworks but has not yet been allocated to the above. The remaining $45.2 million was for expenditure on storages for private diversion and to supplement supplies to local authorities, and for items such as loan flotation expenses, miscellaneous surveys and investigations, and buildings, plant and stores.

Ten Year Program

The Victorian Water Commission's second ten year plan (for the period 1973–83), reflects a changing emphasis towards greater involvement with urban water supply, sewerage, environmental protection and water quality.

Two basic principles were adopted in formulating the program:

(i) That the environmental impact of new projects be taken into account with emphasis on multi-objective planning.
(ii) That each project should be economically sound and viable.

Major provisions of the 1973-83 program include:

the construction of new water supply trunk mains, reticulated services and water treatment plants at an estimated cost of $112 million (including $46 million for locally administered waterworks trusts);

the sewering of all towns with populations over 200 by the end of 1982 at an estimated cost of $37 million;

the expenditure of $15 million by river improvement, flood protection and drainage trusts to preserve flood waterways, protect valuable marginal land and safeguard the natural environment of streams in their catchment area;

expenditure of $7.5 million on rural waterworks districts, including the Millewa pipeline scheme (to be completed by 1975) and commencement of the pipelining of the extensive Mallee domestic and stock channel system;

construction or enlargement of ten major storages at a total cost of $47 million (including Victoria's share of the cost of the Dartmouth Dam project);

expenditure of $58 million on irrigation and drainage works within existing irrigation districts;

expenditure of $30 million to reduce water losses and control seepage in irrigation distribution systems;

provision of adequate drainage systems, including groundwater control in irrigation districts at an estimated cost of $15 million;

expenditure of $13 million on salinity control works to arrest the deterioration of highly productive irrigated lands and protect the River Murray from saline inflows from Victorian irrigation areas;

expenditure of $5.5 million as Victoria's share of capital works undertaken by the River Murray Commission (additional to the Dartmouth Dam Project);

expansion of Water Commission facilities and resources at an estimated cost of $12 million.

Queensland

Introduction

The important primary industries of Queensland are subject to relatively frequent and serious losses by drought and also to extensive flooding. There is therefore a definite and widespread need for the provision of works for water conservation for irrigation, for stock watering and for flood mitigation.

The average annual flow of all streams in Queensland of 133,216.1 mil. cubic metres, equivalent to 38.8 per cent of that for all Australian streams, gives ample scope for such works.

Water resources investigation

The Commissioner of Irrigation and Water Supply is required, under the *Land and Water Resources Development Acts* 1943 to 1946, to (a) prepare a complete description of the natural water resources of the State, both surface and underground, (b) undertake and carry out a survey of such resources, and (c) keep a record of all such natural water resources, surface and underground. For this purpose the Commission has installed and operates 571 stream gauging stations (516 of them being equipped with automatic water level recorders) and collects rainfall data from 32 stations in addition to the Bureau of Meteorology stations.

Licensing and control

As required under the Water Act, rights to underground and surface water are allocated and use controlled by a system of licensing of—(a) all artesian bores in the State; (b) all sub-artesian bores in areas proclaimed by the Governor in Council; the main purpose of proclaiming areas is to ensure the equitable distribution of available supplies and to obtain information on the quantity, quality, extent and use of those supplies; (c) all conservation and use (other than for stock and domestic supplies) of flow in watercourses.

The Commission is required to control use to share supplies as equitably as possible in periods of shortage of supply. At 30 June 1975, 14,409 waterworks licences were in existence, 10,701 being for pumps and 2,941 for dams and weirs and 767 for other works. Areas of sub-artesian water supply proclaimed in which all bores and wells require a license total about 1,420,400 square kilometres. A total of 31,238 bores (artesian and sub-artesian in proclaimed areas) were registered at 30 June 1975.

Development of water resources

The Commissioner of Irrigation and Water Supply is required to prepare a co-ordinated program of work for the conservation, utilisation and distribution of water resources, and to make recommendations to the Government regarding the carrying out of works in this program.

The Commissioner is principally responsible for water conservation and supply works for rural purposes, including irrigation, stock and domestic supply. However, in planning such works, particularly storages, economies to all users can accrue by providing where possible for dual or multi-purpose use of works for irrigation, rural, urban and industrial including power generation and mining purposes. As a result of this approach, 27 cities and towns now draw supplies from Commission storages or by diversion from regulated streams, four storages provide supply for power generation at three thermal stations (Swanbank, Calcap and Collinsville) and one hydro-electric station (Barron Falls), supply for mining operations is drawn from three other storages, and stock water supplies are or will be provided from two Commission and two private pipeline systems serving power stations or mining operations. Urgent water requirements of the expanding mining activities in Central, North and North West Queensland have brought out the need to further ensure the orderly and efficient development of the limited water resources in these areas, to provide for immediate and future needs for both urban, mineral and rural purposes.

Water conservation

At 30 June 1975, the Irrigation and Water Supply Commission controlled and operated 13 dams and 62 weirs with a total available storage capacity of 3,356.2 mil. cubic metres. Two dams (Tinaroo Falls and Eungella) are located in North Queensland; two (Fairbairn and Callide) in Central

Queensland; the other nine (Moogerah, Leslie, Borumba, Coolmunda, Wuruma, Atkinson, Monduran, Maroon and Beardmore) in South Queensland. Of the weirs 37 are in South, 14 in Central and 11 in North Queensland. Weir capacity ranges from 17.3 to less than 0.1 mil. cubic metres; 14 of them having a capacity of over 1.2 mil. cubic metres. Completion of Glenlyon, Kinchant and Julius Dams, Burnett Barrage, Baralaba and Bingedang Weirs now under construction will provide additional storage of 356.5 mil. cubic metres.

Irrigated culture and sources of supply

The total area under agriculture in Queensland in 1974–75 was 1,949,047 hectares. Of this area some 197,143 hectares were irrigated. The area of crops (excluding lucerne and sown and native pastures) irrigated was 156,296 hectares, or 8.0 per cent of the total area under crop. In addition there were 16,243 hectares of lucerne irrigated and 24,604 hectares of other sown and native pastures.

Unlike other States, the greater part of the area irrigated is by individual private pumping plants drawing supply from streams or underground sources, spread widely throughout the State, rather than in constituted irrigation areas where supply is provided by channel systems delivering water to farms.

The following table shows details of the sources of supply for the area of land under irrigated culture during 1974–75.

AREA OF LAND UNDER IRRIGATED CULTURE AND SOURCES OF SUPPLY: QUEENSLAND, 1974-75

Source of supply	*Area irrigated*		*Percentage of total area irrigated*	
Underground supplies—	hectares	hectares	%	%
Naturally replenished Artificially replenished	..	108,729	..	55.2
Surface supplies—				
Irrigation areas	25,066		12.7	
Regulated streams Unregulated streams	48,448		24.6	
Farm dams	14,184	87,698	7.2	44.5
Town water supplies		716		0.4
Total all sources		**197,143**		**100.0**

Because of the predominance of irrigation by private diversion pumping, most of the storages are used to release water downstream to maintain supplies for such diversion.

The following table shows details of the area of crops and pastures irrigated and the methods employed on land under irrigated culture during the 1974–75 season.

AREA OF LAND UNDER IRRIGATED CULTURE: QUEENSLAND, 1974–75

(Hectares)

	Method of irrigation					
Crop	*Spray*	*Furrow*	*Flood*	*Trickle*	*Multiple Methods*	*Total Area*
Sown and native pastures	18,201	129	5,996	8	270	24,604
Lucerne	15,955	8	219	..	61	16,243
Cereals for all purposes	14,257	13,880	5,406	..	217	33,760
Sugar cane	32,173	29,842	8,272	17	3,664	73,968
Cotton	180	6,507	152	..	94	6,933
Tobacco	4,193	45	85	6	50	4,379
Vegetables for human consumption	16,533	1,268	137	325	155	18,418
Fruit	3,854	126	48	695	164	4,887
Grapevines	174	9	12	41	13	249
All other crops	5,845	5,936	1,650	1	270	13,702
Total	**111,365**	**57,750**	**21,977**	**1,093**	**4,958**	**197,143**

Irrigation areas

About 14.8 per cent of the area under irrigation in the State is concentrated in the six established Irrigation Areas constituted under the *Irrigation Act*, 1922–1973, where the supply is generally reticulated by channel systems, by means of gravity or by pumping, from the storage. In addition some supply is also provided from streams regulated by the storage. Details of Irrigation Areas established and one under construction are set out below.

Dawson Valley Irrigation Area. The scheme is situated around the town of Theodore and the area is supplied by five weirs (with a capacity of 36.26 mil. cubic metres) on the Dawson River. Pumping stations deliver water through channel systems to 61 farms. Cotton and grain crops account for the major part of production from irrigated farms. In addition to irrigation demand, the towns of Theodore and Moura and the Theiss Peabody Mitsui Mining Group obtain supplies from the storages.

Burdekin River Irrigation Area and Water Supply Scheme. This scheme is a complex system of water conservation, irrigation, industrial, urban and stock water supply. Storages are Eungella Dam on the Broken River, and Gorge and Blue Valley Weirs on the Burdekin River. From Eungella Dam, water is diverted directly by a privately owned 121 kilometre piped supply system to coal mining operations at Goonyella and Peak Downs and the town of Moranbah. Supplies for other purposes are maintained along the Bowen and lower 114 kilometres of the Burdekin River by release of water from the storages as required. These purposes and the arrangements for supply comprise (i) a pumping station on the Bowen River delivering supply through 34 kilometres of pipeline to the Collinsville Power Station, Collinsville Town and seven grazing holdings along the pipe line. (ii) six pumping stations delivering water through channel systems to 140 individual irrigated holdings in Clare, Millaroo and Dalbeg sections of the Burdekin River Irrigation Area. Principal production crops from irrigated farms are sugar cane, rice and seed crops. (iii) private diversion by pumping for irrigation on individual holdings along the Bowen and Lower Burdekin Rivers.

Mareeba–Dimbulah Irrigation Area. This area is supplied by Tinaroo Falls Dam and weirs on the Barron and Walsh River systems. Water is delivered through channel systems and regulated streams to 567 farms on which the principal crop is tobacco. In addition, water is supplied to the towns of Mareeba, Dimbulah, Walkamin, Mutchilba and Tinarro Falls and to the Hydro-electric Generating Station at Barron Falls.

St George Irrigation Area. This area is located near the town of St George and the principal storages for this area are Beardmore Dam and Jack Taylor Weir on the Balonne River and two weirs on Thuraggi Watercourse. Water is supplied to 31 farms on which the principal crops are cotton, soya beans and cereals and to the town of St George. The area has been extended, to date by a total of 13 new farms. Works to serve the remaining 3 farms in the extended areas are complete.

Emerald Irrigation Area. This scheme, a joint Federal and State undertaking involved the construction of Fairbairn Dam (completed 1972) on the Nogoa River, some 19 kilometres upstream from Emerald. Water from this dam and associated irrigation, drainage and roadworks could ultimately serve 80 or more irrigation farms on which 13,000 hectares could be irrigated annually. In addition, supplies will be provided for coal mining and urban water supply in the Blackwater area.

Bundaberg Irrigation Scheme. This is a joint Federal and State undertaking, estimated to cost $76.01 million aimed at raising the efficiency and security of the established sugar industry in the region. Phase 1 of the Scheme involved the construction of Monduran Dam (capacity 585.9 mil. cubic metres) on the Kolan River, tidal barrages on the Kolan and Burnett Rivers, pumping stations and distribution works. The scheme will ultimately provide an assured water supply to 1,485 assignments with a gross area of 48,500 hectares and 6.2 mil. cubic metres annually to augment supplies to the city of Bundaberg.

Irrigation projects

These are schemes established under the *Water Act* 1926 where water from storage is released downstream to maintain adequate supplies for private pumping under licence, to land adjacent to the watercourse. Details of existing Irrigation Projects are set out in the following table.

IRRIGATION PROJECTS: QUEENSLAND

Project	*Storage*	*Number of licensed pumps*	*Annual water allocation*	*Water supplied 1974-75*		
				Irrigation	*Other purposes*	
			('000 cu m)	('000 cu m)	('000 cu m)	
Warrill Valley	Moogerah Dam	324	12,152	6,382	14,556	Power generation and urban
Mary Valley	Borumba Dam	129	3,265	2,113	3,287	Industrial and urban
Upper Condamine	Leslie Dam	73	11 174	10 145	1 681	Urban
Macintyre Brook	Coolmunda Dam	132	15,417	4,946	406	Urban
Upper Burnett	Wuruma Dam	262	28,927	25,256	927	Urban
Lower Lockyer	Atkinson Dam	157	8,655	5,446	..	
Logan River	Maroon Dam	158	8,035	3,121	..	
Chinchilla	Chinchilla Weir	9	946	167	202	Urban
Blackwater Water Supply	Bedford Weir	..	..	..	2,436	Urban and industrial

Other projects currently under construction or approved are set out below.

Border Rivers Project. The Dumaresq–Barwon Border Rivers Commission consisting of representatives of New South Wales and Queensland was created to control works on these rivers where they form the boundary between the two States, and to allocate the water. (For details *see* page 872).

Eton Irrigation Scheme. Following agreement by the State to accept a $5 million non-reimbursable grant from the Commonwealth Government towards the cost of Kinchant Dam (the main storage for the Eton Irrigation Scheme), the scheme, as laid down in the initial report of January 1970, was modified to serve a greater area of existing cane lands and cope with changes in demand for water supply in the Mackay area.

The modified scheme, estimated to cost $21.8 million, will provide for the annual irrigation of some 8,000 hectares out of 10,300 hectares of irrigated land in the General North Eton area at full development. The scheme will provide assured irrigation supplies along the Pioneer River and urban and industrial requirements in and near Mackay City.

Baralaba Weir Project. The Baralaba Weir Project on the Dawson River is a joint Commonwealth and State undertaking. The project consists of the construction of a weir across the Dawson River and a steel sheet piling weir (completed May, 1975) across an anabranch that leaves the Dawson River upstream of the main weir site. Available supply will be utilised jointly for the Baralaba Town Water Supply, Benleith Rural Water Supply and for private pumping for irrigation both from the storage and from water released downstream.

Bingegang Weir Project. Construction of Bingegang Weir on the Mackenzie River for the purposes of storing water for private pumping to the coal mines at Saraji, some irrigation by riparian landholders and for stock supplies to landholders along the Saraji pipeline, commenced in June, 1975. The work will be largely financed from capital contribution by the Mining Companies, for an annual allocation of water.

Clare Weir. Establishment of camp and facilities associated with the contruction of the weir on the Burdekin River some eight kilometres upstream from Clare Township has commenced. The scheme is a joint Commonwealth/State undertaking and the weir will store 15.5 million cubic metres of water to be used to supplement irrigation supplies to the established irrigation areas and to provide supplies for limited new development.

In the long term in conjunction with a proposed major storage upstream on the Broken River (Urannah Dam), the weir will act as a pumping reservoir for a major irrigation development on the right bank of the river.

Leichhardt River, Mount Isa Area Water Supply Scheme. This scheme, which involves the construction of the Julius Dam on the Leichhardt River and a supply system to convey the water to the Mount Isa area is designed to provide water for the rapidly expanding needs of Mount Isa City and Mount Isa Mines Ltd and to maintain a reserve supply for possible other users in the foreseeable future. A contract was let in April 1973 for the construction of the dam. The Mount Isa Water Board was constituted in March 1973, to construct, own and operate the new supply works and to modify, operate and maintain the existing works for bulk supply to Mount Isa Mines Limited and the City.

Rural, stock and domestic supplies

Rural Water Supply Areas. Improvements to stock and domestic water supplies are assisted by the development of Rural Water Supply Schemes, where water from a central source is distributed through pipelines to individual farms and properties. Investigation and design of these schemes are carried out by the Irrigation and Water Supply Commission. The schemes attract a Government subsidy of 50 per cent of the capital cost, the balance being provided by way of Government guaranteed loans raised by the individual water boards. Operation and maintenance costs and capital charges are wholly met by rates levied on benefited properties. Fifteen schemes are in operation with a total benefited area of 115,872 hectares on 616 rural holdings.

Bore Water Supply Areas. Bore Water Supply Areas are constituted under the Water Act for the purpose of supplying water from artesian or sub-artesian bores to groups of adjoining properties for the watering of stock. The construction or acquisition of a bore and distribution system within an Area is financed by a Treasury loan, and rates calculated on the basis of area benefited are levied annually to meet loan repayments and maintenance and operating costs. Of the 60 Bore Water Supply Areas currently operating in the State, 54 are administered by the Commission and six by local boards elected by the ratepayers within the areas. A total daily flow of 0.1 million cubic metres was distributed through some 3,605 kilometres of drains to serve a benefited area of 1,800,000 hectares on 375 holdings.

River improvement trusts

These trusts are virtually autonomous bodies whose responsibility is to carry out and maintain works to improve stream channels, to increase their flood carrying capacity, to prevent or repair bank erosion and to mitigate flooding. Eighteen trusts are constituted throughout the State.

Drainage areas

Eleven drainage areas—eight in irrigation areas and three administered by autonomous drainage boards—have been constituted. These areas serve 339 holdings by 431 kilometres of drain; a total area of 29,245 hectares being drained.

Underground water supplies

The availability of underground water, particularly the Great Artesian Basin, has played a very big part in the development of the pastoral industry in Queensland. Underground water is also used extensively for irrigation on individual farms, particularly along the coastal fringe, and for domestic purposes. Over half the area irrigated in Queensland receives its supplies from underground sources and in accordance with the requirements of *The Land and Water Resources Development Acts* 1943 to 1946, the investigation of availability of underground water is being pursued by geological mapping, investigation drilling and hydro-geological assessment. The most important areas where water from this source is used for irrigation are in the following river basins; the Lower Burdekin, the Don (Bowen), the Pioneer, the Callide Valley, the Lower Burnett, many parts of the Brisbane Basin, including the Lockyer, and parts of the Upper Condamine Basin.

Burdekin Delta recharge. For the first time in Australia, the artificial replenishment of underground water supplies has been implemented in the Burdekin Delta. The North and South Burdekin Water Boards divert unregulated supplies of water from the Burdekin River for the purpose of artificially recharging the underground supplies from which some 29,000 hectares of sugar cane and 600 hectares of rice and other crops are irrigated and supplies for stock and domestic purposes, including the towns of Ayr and Home Hill are drawn.

Artesian water. The Great Artesian Basin in Queensland consists approximately of the area lying west of the Great Dividing Range, excluding the Cloncurry Mineral Field and the Barkly Tablelands. It comprises about 1,124,000 square kilometres, or about two thirds of the total State area. This part of the State is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores, and, where normal surface storage is not readily available, on excavated tanks. At 30 June 1975, a total of 3,349 artesian bores had been drilled in the Great Artesian Basin, of which 2,276 continue to flow, providing a supply of 0.9 million cubic metres per day. Although this supply will continue to diminish for a further 30 to 40 years, after that time a steady and continuous flow of some 0.6 million cubic metres per day is expected to be maintained.

Stock route watering

In 1935 the Trunk Stock Route System was inaugurated and from then on the construction of watering facilities on stock routes was greatly expanded. The Irrigation and Water Supply Commission acts as a constructing authority for the Stock Routes Co-ordinating Board in these matters, and had, to 30 June 1975, completed 648 facilities with a further 5 under construction and 8 under investigation. The two authorities mentioned above carry out continuous investigation to ascertain general stock movements so that new facilities may be provided as required.

Farm Water supplies

Under the *Farm Water Supplies Assistance Acts* 1958 to 1965, technical assistance is available to landholders throughout the State on all matters relating to water conservation and utilisation for domestic, stock and irrigation purposes, on individual holdings or groups of holdings, covering construction of farm dams, irrigation bores and stock bores, and pumping and distribution systems. In addition, the Government provides finance to farmers by way of special Agricultural Bank loans, and technical advice on construction and installation. During 1973–74, 735 applications and in 1974–75, 701 applications, were received for assistance under this Act and advances of $393,822 and $628,894 respectively were paid by the Bank bringing the total advances over the 17 years of the scheme's existance to $9,892,025.

By 30 June 1975, 7,540 property inspections had been carried out, 1,914 final plans had been issued for 21,648 hectares of irrigation and for storages with capacity of 26.5 million cubic metres for irrigation purposes and 16.9 million cubic metres for stock use at an estimated cost of $10,041,323.

South Australia

Administration

All major water resources and most public water supply schemes in South Australia are administered by the Engineering and Water Supply Department under the various statutes mentioned below.

The Waterworks Act, 1932–1974 empowers the Minister of Works to impound or divert the water from any lake, watercourse or underground source for the purpose of establishing and maintaining public water supply schemes to serve proclaimed water districts throughout the State. The Engineering and Water Supply Department administers and operates the great majority of water supplies in South Australia. A feature of these supplies is the extensive networks of pipelines transporting water over long distances from major resources to cities, towns and farmlands as well as numerous separate town and farmland schemes. A few domestic water supply schemes in Government irrigation areas along the Murray Valley in South Australia are administered by the Department of Lands. The Electricity Trust of South Australia administers and operates the water supply of Leigh Creek town and coalfield.

The Water Conservation Act, 1936–1972, relates to the provision of small dams, wells, bores and other waterworks to assist development in the more remote areas of the State or to provide water for travellers and travelling stock in such areas.

Under the River Murray Waters Act, 1935–1971, which ratifies the River Murray Waters Agreement, the Engineering and Water Supply Department operates and maintains Lake Victoria storage, nine weirs and locks downstream of Wentworth, N.S.W., and barrages at the river mouth.

The Water Resources Act, 1976 which came into force from 1 July, 1976, supersedes the Control of Waters Act 1919 and the Underground Waters Preservation Act 1969 and represents the culmination of the development of the Government's water resources policy involving the management of all aspects of water—surface and underground, quality and quantity.

The Act provides for the control or diversion of surface waters from Proclaimed Watercourses and for the control of the withdrawal of underground waters from Proclaimed Regions. At the time of commencement of the Act, the River Murray was the only Proclaimed Watercourse and the Proclaimed Regions were the Northern Adelaide Plains and Padthaway. The legislation provides for control over the construction or modification of most categories of wells over the whole State and for the abatement of pollution of all waters.

It establishes a South Australian Water Resources Council and Regional Advisory Committees as vehicles for public involvement in the water resources management process. At the time of commencement of the Act Regional Committees operated in respect of the River Murray, the Northern Adelaide Plains, Padthaway and the Arid Areas. In addition the Act provides for a Water Resources Appeal Tribunal to give individuals the opportunity to appeal against decisions of the Minister pursuant to the Act.

Irrigation

Australian irrigation originated in the upper Murray in South Australia and the Mildura area of Victoria. South Australian irrigation commenced with an agreement between the Chaffey brothers in 1887 whereby an area was made available for the establishment of certain irrigation works at Renmark. From this start government, co-operative and private irrigation areas totalling more than 42,000 hectares have been developed in the South Australian section of the Murray Valley.

The major authorities controlling River Murray irrigation are the Department of Lands which administers government controlled areas totalling 17,000 hectares (under provisions of the Irrigation Act, 1930–1971 and other statutes), and the Renmark Irrigation Trust (founded on the Chaffey brothers' venture) which administers distribution works supplying 4,000 hectares of irrigated land (under provisions of the Renmark Irrigation Act, 1936–1969). In addition some 21,000 hectares of irrigated lands are controlled by smaller co-operatives, development companies and private owners.

In the Government irrigation areas land is leasehold, whereas in the areas controlled by the Renmark Irrigation Trust and other co-operatives with local boards of management the land is freehold.

The irrigation areas comprise high land areas to which water is pumped from the River, and reclaimed swamp lands along the lower section of the River which are watered through sluices in the protecting levees. Considerable importance is placed on adequate drainage of both high lands and reclaimed swamp lands.

The principal high land crops comprise citrus and stone fruits and vines. The reclaimed swamps are used almost exclusively for pasture and fodder crops. However, vegetable crops of various kinds are also important in both types of irrigated lands.

Except for quantities held in various lock pools and natural lakes, no water from the Murray is stored within South Australia for irrigation purposes. Usage of the River is therefore planned on the basis of the minimum monthly flows to which South Australia is entitled under the River Murray Waters Agreement. This factor, plus the need to reserve water for city, town and rural water supply system, has resulted in the expansion of irrigation from the River being rigidly controlled by the government.

Diversions of water for irrigation of areas in excess of 0.4 hectares are made under licence issued under the Water Resources Act, 1976. Irrigation offtakes are metered but no charge is made for water taken unless licensed quotas are exceeded. However, block holders in government and trust operated irrigation schemes are rated or charged by measure by the administering authorities to recoup pumping and distribution costs.

In addition to irrigation from the River Murray there are considerable areas irrigated from underground sources by individual landholders in South Australia. The most important of these areas comprise 3,500 hectares of market gardens on the northern Adelaide plains and 6,000 hectares of pastures, fodder and seed crops, and vines in the Padthaway district of the south-eastern region.

Irrigated culture

The following table shows details of the area of crops and pasture and the methods employed on land under irrigated culture during the 1974–75 season.

AREA OF LAND UNDER IRRIGATED CULTURE: SOUTH AUSTRALIA, 1974-75
(Hectares)

	Method of irrigation					
Crop	*Spray*	*Furrow*	*Flood*	*Trickle*	*Multiple methods*	*Total area*
Sown and native pastures	8,174	. .	14,166	. .	18	22,358
Lucerne	12,858	. .	4,182	. .	16	17,056
Cereals for all purposes	350	. .	80	. .	(a)	430
Vegetables for human consumption	5,181	483	132	33	59	5,888
Fruit	9,328	2,751	133	845	206	13,263
Grapevines	5,511	9,663	742	1,689	382	17,987
All other crops	646	57	1,251	5	7	1,966
Total	**42,048**	**12,954**	**20,686**	**2,572**	**688**	**78,948**

(*a*) Not available for publication; included in 'All other crops'.

Water supply schemes

Adelaide Metropolitan Water Supply. Adelaide and surrounding areas of urban and rural development extending 80 kilometres to the south and 80 kilometres to the east and north receive water from nine reservoirs in the nearby Mount Lofty Ranges and by means of two pipelines pumping from the River Murray at Mannum and Murray Bridge.

The principal sources of supply for the reservoirs are the Rivers Torrens, Onkaparinga, South Para and Myponga. These have been developed to provide a total storage capacity of 188.7 mil. cubic metres in the nine reservoirs. A tenth reservoir to provide a storage of 18.0 mil. cubic metres on the Little Para River is under construction.

The pipeline from Mannum has a nominal annual capacity of 118.0 mil. cubic metres and the one from Murray Bridge an annual capacity of 163.0 mil. cubic metres. Actual quantities pumped however, depend upon intakes of reservoirs and consumption as influenced by climatic and demand factors. On the average the Adelaide water supply system currently depends upon the River Murray for about 30 per cent of its supply, with the percentage rising with urban and industrial development.

Water consumption for the whole area in 1975–76 was 172.3 mil. cubic metres, the amount pumped from the Murray through the two pipelines being 44.9 mil. cubic metres.

Capital works are financed principally from State loan funds. The net loan funds invested at 30 June 1976 in the Adelaide metropolitan water supply system was $169,447,000. New works in progress include the Little Para dam estimated to cost $37,000,000 and a ten year program to provide water treatment works for all sources of supply at an estimated cost of $119,000,000. Commonwealth Government financial assistance is being provided for the latter program.

Country reticulation supplies. Areas extending to a distance 145 kilometres north of Adelaide are supplied from the Warren, Barossa and South Para Reservoirs (61.2 mil. cubic metres) in the Barossa Ranges. Supplies to these areas are supplemented by River Murray water delivered into the Warren Trunk Main by a pipeline extending from Swan Reach to a point near Stockwell. This pipeline has a nominal capacity of 24.9 mil. cubic metres per year. Areas further north are supplied from Beetaloo, Bundaleer and Baroota Reservoirs (capacity 16.2 mil. cubic metres) and the duplicate Morgan–Whyalla Pipeline system which can supply up to 65.7 mil. cubic metres per year from the River Murray. A large part of Eyre Peninsula is supplied through the 386 kilometres Tod Trunk Main and branch mains which distributes water from the Tod Reservoir (11.3 mil. cubic metres) and the Uley–Wanilla, Lincoln and Polda underground basins. Along the River Murray all towns are supplied from the River with reticulation to surrounding farmlands up to 50 kilometres distant in some cases. A pipeline extended from Tailem Bend to Keith and a network of branch mains provide the means of conveying River Murray water to numerous towns and large areas of farmlands in the upper south-east.

Surface and underground resources have been developed to supply most country centres not covered by the larger schemes. Victor Harbor and adjoining south coast resort centres are supplied from reservoirs and the River Murray. A reservoir on Kangaroo Island supplies Kingscote and adjacent farmlands. Underground resources of the lower south-east supply all towns in the region, the city of Mount Gambier and nearby farmlands being reticulated from the well-known Blue Lake. At the far northern opal mining town of Coober Pedy a reverse osmosis desalination plant provides a potable supply from brackish groundwater. Other centres in the far north obtain supplies from the Great Artesian Basin.

Net loan funds invested in country water conservation and distribution works at 30 June 1976, amounted to $167,032,000 (exclusive of river control and irrigation works on the River Murray). The various water supply systems contain approximately 14,650 kilometres of water mains from which consumption in 1975–76 was 82.8 mil. cubic metres.

Works in progress include extension of reticulation works on central Eyre Peninsula, for which a Commonwealth Government grant of $2,100,000 has been received, development of Uley South Underground Basin on southern Eyre Peninsula to augment the supply at Port Lincoln, and upgrading of various other country systems to meet current demands.

Underground water

For information on underground water resources in South Australia *see* Year Book No. 55 and earlier issues.

Farm water schemes

The Department of Agriculture provides an advisory service on water conservation and irrigation designs on farms, and on the suitability of surface and underground water for irrigation and stock purposes. In addition, a great part of the farming areas is supplied by the Engineering and Water Supply Department with water under pressure from extensive distributions systems connected to various reservoirs and the Murray River.

South-eastern drainage

In the south-east of South Australia it has been necessary to construct drainage schemes to dispose of surplus water from areas where a series of valleys or flats is separated by low ranges, parallel to the coastline, which prevent natural drainage. The Millicent Drainage System, completed in 1885, reclaimed about 40,500 hectares. The South-eastern Drainage Area System, which is controlled by the South-eastern Drainage Board, comprises drains constructed by the State Government at public expense, plus those undertaken by the Government in co-operation with the landholders. The area is bounded on the east by the State boundary, and on the west by the sea coast. It extends from about 89 kilometres north of Kingston, southerly to near Millicent and Kalangadoo. Up to 1948 about 692 kilometres of drains had been provided at a cost of $1,441,752. These were of a developmental nature intended more to promote the rapid removal of floodwaters than to provide a complete system of drainage. Since 1948 the complete drainage of the Biscuit, Reedy Creek and Avenue Flats in the Western Division has been carried out. The southern section of 105,200 hectares involved the excavation of 6,193,000 cubic metres in providing 552 kilometres of new or enlarged drains, whilst the northern area of 56,650 hectares required the excavation of 2,333,000 cubic metres in the construction of 159 kilometres of drain.

The drainage of 294,200 hectares in the Eastern Division of the south-east, situated east of Bakers Range and extending from near Kalangadoo to north of Naracoorte, was commenced in 1960 and completed in 1970. The work required the construction of a main diversion drain (consisting of the enlargement of 39 kilometres of existing drain and the construction of 35 kilometres of new drain) from the sea at Beachport to the Naracoorte–Mount Gambier railway line near Struan. The provision of new branch drains and the enlargement and extension of existing branch drains completed the approved works. A total excavation of 5,581,000 cubic metres over a length of 189 kilometres of new or enlarged drains was involved.

The capital cost of drainage in the South-eastern Drainage Area System to 30 June 1976 was $18 million, and the length of drains constructed was 1,408 kilometres. An extensive system of private drains (many of which discharge into drains constructed under Government authority) also exists in the south-east of the State.

Murray River Irrigation Areas

Where irrigation water in excess of plant requirements has been applied, perched water tables develop. Rising to the level of tree roots, these cause the death of orchards from salination and water-logging. Most orchards and vineyards are now drained by plastic and tile drainage systems, thus restoring their health and productivity. At present disposal of drainage water is achieved by pumping to basins on river flats where it evaporates, or is discharged into the river when it is in flood. It may also be discharged into underlying sand and limestone aquifers. The usefulness of these aquifers is declining as they are becoming fully charged with water.

Investigations are being made, in the light of the new Water Resources Act, into alternative disposal schemes to provide added protection to both the river and the associated underground aquifers.

Western Australia

Administration

The Minister for Water Supply, Sewerage and Drainage administers the departmental irrigation schemes under the *Rights in Water and Irrigation Act, 1914–1971*. He is advised by an Irrigation Commission representing the local irrigationists and government, technical and financial branches. He also administers, under the *Country Areas Water Supply Act, 1947–1964*, the water supplies to certain country towns and reticulated farmland. As Minister for Works he controls minor non-revenue producing supplies to stock routes and a few mines and agricultural areas with their associated communities. A small number of town supplies are administered by local boards under the *Water Boards Act, 1904–1969*, which provides a large degree of autonomy with ultimate Ministerial control.

Irrigation

Irrigation schemes have been established by the Government on the coastal plain south of Perth in the Waroona, Harvey and Collie River Irrigation Districts between Waroona and Dardanup, the water being channelled from dams in the adjacent Darling Range.

Logue Brook Dam with a capacity of 24.3 mil. cubic metres, Harvey Weir (8.0 mil. cubic metres) and Stirling Dam (57.0 mil. cubic metres) supply the Harvey Irrigation District, the rated area of which is 5,581 hectares. The Harvey District links up with the Waroona Irrigation District, which is served by Waroona Dam (15.0 mil. cubic metres), Drakes Brook Dam (2.3 mil. cubic metres) and Samson Brook Dam (9.2 mil. cubic metres) and comprises a rated area of 1,573 hectares. Wellington Dam on the Collie River with a capacity of 185.2 mil. cubic metres serves an area of 4,896 rated hectares in the Collie River Irrigation District. Pastures for cattle comprise 91.9 per cent of water usage in these districts. Glen Mervyn Dam (1.5 mil. cubic metres) stores water for regulated release down the Preston River for irrigation of orchards and crops when the natural summer stream flow is insufficient to meet the demand.

Since the mid 1930s, a centre of tropical agriculture has been developed at Carnarvon, near the mouth of the Gascoyne River. Private pumping from sands of the Gascoyne River is the principal source of irrigation water for the 167 plantations. Because of the high risk of drawing in surrounding saline ground waters by over-pumping, the usage of water by the planters is controlled strictly by the Government. The Government is developing up-river sources and delivers water by pipeline to 109 plantations in the district. Bananas for the Perth market and fruit and vegetables for the Perth and Adelaide markets are the principal crops. A tropical research station is maintained at Carnarvon by the Department of Agriculture.

The Ord River Irrigation Project in the Kimberley Division provides for the eventual development of an irrigation area of 72,000 hectares of land, one third of which is in the Northern Territory.

The first stage, in which water was supplied to 30 farms averaging 270 hectares plus a 970 hectare pilot farm from the Kununurra Diversion Dam with a capacity of 98.7 mil. cubic metres, was completed in 1965. Cotton was the principal crop with grain sorghum and fodders for cattle fattening also important. Completion in 1971 of the Ord River Dam, which stores 5,720 mil. cubic metres in Lake Argyle, has allowed expansion of the area to be irrigated into the second stage. Five farms averaging 388 hectares were allocated in 1973. Since then cotton has been phased out due to high off farm costs and increasing costs of insect control specific to the cotton industry. A downturn in the Australian beef industry coincided with this and farming activity was reduced. Rice and peanuts are now showing promise commercially.

The Camballin Irrigation District on the Fitzroy River flood plain in the West Kimberleys is dependent on diverted river flows and a small volume of storage behind the diversion structures on the Fitzroy River and Uralla Creek. Grain and fodder sorghums are the main crops.

Irrigated culture

The following table shows details of the area of crops and pasture and the methods employed on land under irrigated culture during the 1974–75 season.

AREA OF LAND UNDER IRRIGATED CULTURE: WESTERN AUSTRALIA, 1974-75
(Hectares)

Crop	*Method of irrigation*					Total area
	Spray	*Furrow*	*Flood*	*Trickle*	*Multiple methods*	
Sown and native pastures	1,575	2,389	9,655	4	106	13,729
Lucerne	803	28	254	. .	15	1,100
Cotton	. .	1,564	240	. .	. .	1,804
Cereals for all purposes	226	941	561	. .	. .	1,728
Vegetables for human consumption	3,261	284	175	53	55	3,828
Fruit	2,914	197	132	1,504	173	4,920
Grapevines	389	18	36	171	17	631
All other crops	123	176	9	. .	10	318
Total	**9,291**	**5,597**	**11,062**	**1,732**	**376**	**28,058**

Country water supplies controlled by Department of Public Works and Water Supply

Since 1947 enlargement and extensions of the Goldfields and Agricultural Water Supply and the development of the Great Southern Towns Water Supply have been carried out, mainly in accordance with a project known as the Modified Comprehensive Scheme. Under this scheme water has been supplied to towns and farms in an area of 1,700,000 hectares in mixed farming (cereal and sheep) districts of Western Australia. The modified scheme was completed in 1961 at a cost of $20.6 million, of which the Commonwealth Government contributed $10 million under the *Western Australia Grant* (*Water Supply*) *Act* 1948. A further request was made by the State Government in 1963 for a grant of $10.5 million representing half the estimated cost of proposed extensions which would increased by 1,500,000 hectares the area served by the scheme. The Commonwealth Government agreed to provide assistance in the form of an interest-bearing loan up to a maximum of the amount requested, advances to be made during a period of eight years commencing 1965–66. Legislative authority for the loan is given by the *Western Australia* (*South-west Region Water Supplies*) *Agreement Act* 1965.

Mundaring Reservoir on the Helena River, 42 kilometres from Perth, is the source of water supplied to the Eastern Goldfields. It has a capacity of 77.0 mil. cubic metres and is connected to Kalgoorlie by a pipeline with extensions to towns and agricultural areas. At 30 June 1975 the Goldfields and Agricultural Water Supply was serving 94 towns and localities, and water was being reticulated to farms in an area of 2,300,000 hectares. The total length of pipelines was 8,151 kilometres and the number of services was 27,157. Consumption during 1974–75 including supplies drawn from local schemes and from the Metropolitan Water Supply, was 18.6 mil. cubic metres.

The Great Southern Towns Water Supply pipes water from Wellington Dam to towns on the Great Southern Railway from Brookton to Katanning as well as a number of other towns. At 30 June 1975 the Supply was serving 32 towns and water was being reticulated to 600,000 hectares of farmland. The total length of pipelines was 1,596 kilometres, and the number of services was 10,653. Consumption during 1974–75, including supplies drawn from local sources, was 4.9 mil. cubic metres.

Eighty six local schemes supply water from stream flow, dams, tanks, wells, and bores, mainly to country towns. At 30 June 1975 the total length of water mains was 1,618 kilometres and the number of services was 27,265. Consumption was 15.1 mil. cubic metres. There are 7 Regional Waters Supply areas, supplying 27 towns. Consumption was 17.2 mil. cubic metres, number of services totalling 14,267, and length of water mains 1,074 kilometres.

Other country water supplies

As well as the schemes controlled by the Department of Public Works and Water Supply, there are four local Water Boards which draw supplies from stream flow, dams, wells, and bores. In addition, some local authorities supply water within their boundaries. The Forests Department, sawmilling companies, and mining companies operate schemes to supply water to their towns and operations. Railways of the Commonwealth and State Governments make independent provision for supplies of water for their own purposes, although considerable additional quantities are consumed by the railways from other sources, such as those controlled by the Department of Public Works and Water Supply and the Metropolitan Water Supply, Sewerage and Drainage Board.

Underground water

Extensive use is made of underground water for town water supplies, household gardens, market gardening, orchards, pastures and stock water. Artesian wells throughout the State and non-artesian wells within 'declared' areas must be licensed under the *Rights in Water and Irrigation Act, 1914–1971.*

Tasmania

Main purposes of water conservation and utilisation

Because of the generally more adequate rainfall in Tasmania, scarcity of water is not such a problem as it is in most mainland areas, though not all streams are permanently flowing. The only large scale conservation by reservoirs is for hydro-electric power generation, but there are some moderately sized dams built by mining and industrial interests and by municipal authorities for town water supplies. 'Run of the river' schemes are quite adequate for assured supply in many municipalities. The main supply for Hobart and adjacent municipalities originates from a 'run of the river' scheme based on the Derwent River. The river is controlled in its upper reaches by eight dams, built for hydro-electric power generation, and these tend to stabilise river flow.

Until a few years ago irrigated areas were negligible except for long established hop fields, but there is a rapidly expanding use of spray irrigation on orchards, pastures, potatoes and beans. Until recent years there has been almost complete dependence on natural stream flows, but the need for some regulating storages has become apparent. Increasingly, farmers are constructing storages of their own, and the extension of this practice is foreseen as the logical solution in most areas, as valleys are narrow and steep sided. Single large reservoirs cannot economically serve large areas of suitable land, as nearly every valley is separated from others by pronounced hills, prohibiting the construction of cross-country channels.

Underground water suitable for stock, minor irrigation works and domestic use is exploited in the consolidated rocks of southern, midlands and north-western Tasmania. In the south and midlands nearly all groundwater is obtained from Permian and Triassic rocks. In the north-west, water is recovered from a variety of rocks ranging from Precambrian dolomites, quartzites and schists to Tertiary basalts and Quaternary sands. The highest yields are obtained from the dolomites and the basalts. In the central north and north-east unconsolidated Tertiary clays and gravels yield water of variable quality, and in some coastal areas, notably King and Flinders Islands, water is obtained from aeolian sands.

The Mines Department is charged with the investigation of underground water resources. There is a great reserve of untapped permanent streams in the western half of the State, which is largely unsettled. The State's largest rivers discharge in the west, but diversion to the eastern half of the watersheds is not regarded as practicable. The Hydro-Electric Commission, however, has planned for the future development of four storage dams in the West Coast region on the Pieman, Murchison and Mackintosh Rivers.

Administration

In Tasmania, water supply was once exclusively the responsibility of local government authorities, but two statutory authorities, the Metropolitan Water Board and the Rivers and Water Supply Commission, now operate bulk supply schemes, piping water for distribution by the local government authorities in the Hobart and Launceston regions, and directly to certain industrial consumers.

Metropolitan Water Board. The overall control of the supply of water to the cities of Hobart and Glenorchy and the municipalities of Kingborough and Clarence is vested in the Metropolitan Water Board, the local government authorities retaining primary responsibility for reticulation and sales to consumers. Water is also supplied by the Board to urban areas in the Sorell, New Norfolk and Brighton municipalities. The principal source of water for urban Hobart is the Derwent River from which the Metropolitan Water Board operates two schemes. The West Derwent Water Supply supplies the cities of Hobart and Glenorchy and the Kingborough Municipality. Water for this scheme is drawn from the Derwent at the Bryn Estyn pumping station. The Southern Regional Water Supply scheme, originally constructed by the Rivers and Water Supply Commission to serve Clarence Municipality and other areas on the eastern shore of the Derwent, draws its water from the Derwent at Lawitta (almost directly opposite the intake for the West Derwent Water Supply Scheme). The responsibility for loan raising, debt servicing and extensions to the schemes rests with the Metropolitan Water Board.

Rivers and Water Supply Commission. The Commission is empowered by the *Water Act* 1957 to take water at streams and lakes, or to issue others with licences to do so; licensing covers supply to specific industries and municipalities as well as irrigation. The Commission is concerned with drainage trusts' operations, river improvements (including repairs after flood damage), stream gauging, its own regional water schemes, and with water supply, sewerage and drainage of towns. It operates in a similar manner to the Metropolitan Water Board in controlling the water schemes serving the East Tamar region (North Esk Regional Water Supply), the West Tamar area (West Tamar Water Supply) and the Prosser River Scheme, which was originally constructed to supply water to a sodium alginate industry at Louisville near Orford and to supplement the water supply of the township of Orford (in December 1973 the sodium alginate industry ceased production). The North Esk Regional Water Supply was constructed to meet industrial requirements of the alumina refinery and other industries at Bell Bay, and to provide bulk supplies to surrounding municipalities on the eastern bank of the River Tamar. The West Tamar Water Supply was constructed primarily to meet domestic requirements of urban areas in the Beaconsfield municipality. The local government authorities retain primary responsibility for reticulation and sale to consumers, except to certain industrial users.

In municipalities not serviced by the Metropolitan Water Board or the Rivers and Water Supply Commission, the supply of water is a function of the local municipal council. Where the construction of water and sewerage schemes is beyond the financial capacity of a local government authority, or if it requires assistance to pay for water supplied from regional schemes, the Commission may make recommendations to the Minister for payment of a subsidy.

Industrial water schemes

Four principal industrial water schemes have been installed privately—for a paper mill at Boyer using water from the Derwent River, for a paper mill at Burnie using water from the Emu River, for another at Wesley Vale using water from the Mersey River, and for a factory at Heybridge reticulating water from Chasm Creek. The State Government has constructed some water schemes for use primarily for industrial purposes. These include the scheme serving the alumina refinery at Bell Bay referred to above, and a storage supplementing the summer flows of the Kermandie River for use by a woodpulping plant at Geeveston.

Irrigation

The Cressy-Longford Irrigation Scheme was officially opened in March 1974 and services approximately 65 farms within the irrigation district. The farms are supplied with irrigation water by either flood or spray sprinkler systems. A further 30 farms, on the fringes of the irrigation district, will benefit from augmented river flows. This scheme, which was designed and is operated by the Rivers and Water Supply Commission, involves the diversion of water from the tailrace of the Poatina hydro-electric power station through some 97 kilometres of earthen channels to irrigate eventually some 8,094 hectares. At least half this area will be served by gravity and it is estimated that under maximum development 7.4 mil. cubic metres of water annually would be available to farmers both inside and outside the irrigation district.

The Cressy-Longford Scheme and a privately owned scheme at the Lawrenny estate at Ouse are the only extensive irrigation works in Tasmania. A large portion of the area under irrigation in the State is watered by private schemes pumping water from natural streams.

Irrigated culture

The following table shows details of the area of crops and pasture and the methods employed on land under irrigated culture during the 1974–75 season.

AREA OF LAND UNDER IRRIGATED CULTURE: TASMANIA, 1974-75
(Hectares)

	Method of irrigation					
Crop	*Spray*	*Furrow*	*Flood*	*Trickle*	*Multiple methods*	*Total area*
Sown and native pastures	5,852	497	4,442	19	279	11,089
Lucerne	956	24	35	1	18	1,034
Cereals for all purposes	257	..	..	..	..	257
Vegetables for human consumption	7,302	28	..	8	38	7,376
Fruit	2,142	49	99	211	104	2,605
All other crops	1,030	164	115	15	1	1,325
Total	**17,539**	**762**	**4,691**	**254**	**440**	**23,686**

Northern Territory

Information on climatic conditions will be found in the chapter Climate and Physical Geography of Australia, and a brief outline of contour and physical characteristics in Chapter 30, The Territories of Australia.

Administration

Under the *Control of Waters Ordinance* 1938 of the Northern Territory, control of natural waters are vested in the Crown. Where a watercourse or lake forms a boundary of any land alienated by the Crown, the beds and banks are deemed to remain the property of the Crown (except in special cases). The diversion of water is prohibited except under prescribed conditions. The Ordinance requires that drilling for ground-water be carried out only by drillers who are registered under the Ordinance. Registered drillers are required to provide the Government with information on bores drilled including the location, depth and size of bore, strata encountered and water produced. In particular areas, described as Water Control Districts, where stricter control is necessary the construction or use of a well or water bore without a permit can be prohibited.

Under the *Water Supplies Development Ordinance* 1960 any landholder engaged in pastoral or agricultural production may seek information or advice from the Commissioner of Water Development who is appointed under the Ordinance. He may also apply for an advance towards the cost of work proposed to be carried out. The Ordinance also provides for a refund to the landholder of the cost of drilling an unsuccessful bore where the landholder had applied to the Commissioner for advice on its construction and has carried out all drilling operations in accordance with advice given.

The Water Resources Branch of the Department of the Northern Territory carries out systematic stream gauging, the collection of data relating to the quantity and quality of surface and ground water, the planning of water use for industrial, irrigation and town water supplies, and flood prevention and control. It also provides a general advisory service to the public on water resources and water conservation by providing information on the geology of the Territory, the prospects of obtaining groundwater, the possible location of bore sites, the method of drilling and equipping bores, information on stream flows, surveys of dam sites, the design of water supply schemes and reticulation layouts, and on the chemical and bacteriological quality of water supplies. It is involved in water pollution studies and control, and carries out environmental assessments of water and related developments. The Branch administers both of the ordinances described.

Underground water

For information on underground water resources in the Northern Territory *see* Year Book No. 55 and earlier issues, and the Australian Water Resources Council's 1972 publication, *Groundwater Resources of Australia.*

At June 1975, 8,986 bores and wells were registered in the Northern Territory. Of these 5,039 were for pastoral use, 441 for agricultural use, 769 served town domestic supplies, 154 were is use on mining fields, 1,066 were investigation bores and 1,517 were classified under other uses. These include successful bores which have collapsed and bores which were unsuccessful owing to drilling difficulties, or to insufficient quantity or poor quality of the groundwater.

To assess the effects of pumping, water level measurements are regularly taken in about 200 bores of which 25 are equipped with automatic recorders.

Community water supplies

The largest water conservation projects in the Territory are the Darwin River Dam (259.0 million cubic metres) and the Manton Dam (15.7 million cubic metres) which both serve Darwin with a reticulated water supply. Groundwater from McMinns Lagoon area can be used to augment supply,

Most other towns and communities including Alice Springs, Tennant Creek, Katherine and Nhulunbuy are supplied from groundwater.

Surface water measurement

The hydrological investigations required in the Northern Territory as part of the National Water Resources Assessment Program are being carried out by the Water Resources Branch. The program for the Northern Territory includes establishment of base streamgauging stations and pluviographs (automatic rainfall recorders). In particular areas of development where water supply or irrigation proposals require special or extra surface water data, supplementary gauging stations are built to obtain this information. At 30 June 1975 the streamgauging network of the Water Resources Branch comprised 241 operating stations; of these 198 were base gauging stations and 43 were supplementary stations. At the same time some 115 pluviographs were being operated by the Water Resources Branch. Other authorities, such as the Commonwealth Scientific and Industrial Research Organization and the Bureau of Meteorology, also maintain streamflow and rainfall recording stations in the Northern Territory.

Irrigation for agricultural purposes in the Territory is not extensive, being confined to isolated locations near the Darwin, Adelaide River, Coomalie Creek, Daly River, Katherine River, Wickham River, Douglas River, Edith River and Alice Springs area, with only small areas being utilised. In the Territory 88 licences to divert water from streams were current at 30 June 1976. The total licensed area for irrigation is 2,536 hectares, but the actual area irrigated is less than this. There are also a number of farms irrigated from bore supplies, particularly in the Alice Springs area. Purposes for which irrigation water is used include the growing of fruit, vegetables, crops, fodder and pastures, and also dairying and mixed farming.

Both the Daly and Adelaide Rivers appear to offer considerable potential for irrigation development with regulation of the rivers. Extensive investigations are being conducted into possible dam sites and areas of land suitable for irrigation in the region, and there is a need for other associated studies. Irrigation trials are in progress using water from the high-production bores in the Daly Basin. Further exploratory drilling in this area is being carried out. There is an increasing demand for water resource assessment studies and assistance for relatively small irrigation projects.

Investigations are continuing into areas of the Northern Territory which may be suitable for irrigation from the main storage on the Ord River in Western Australia.

Australian Capital Territory

The climate of the Australian Capital Territory is such that annual evaporation exceeds the annual rainfall of about 600mm. Primary producers have therefore found it necessary to practise water conservation, and to irrigate from groundwater supplies during dry periods.

Surface water

Surface-water storages supplying the Capital City (pop. about 200,000) and the city of Queanbeyan (pop. about 20,000) are located in the heavily timbered, mountainous, western part of the A.C.T. within the catchment of the Cotter River. Corin, Bendora and Cotter dams serve the two cities, and another storage, Googong dam, is being developed on the Queanbeyan River to the east of the A.C.T.

Ground water

Ground water in the A.C.T. and environs occurs mainly in fractures in crystalline rock such as granite and porphyry; in folded and fractured slate; and in solution cavities in limestone. Alluvial aquifers of significance are restricted to the Lake George basin and small areas along mature sections of the Molonglo and Murrumbidgee Rivers. Groundwater has been used in the past by most primary producers to augment surface storage. Groundwater production bores in the A.C.T. have yields ranging between about 0.4 and 20 cubic metres per hour; 3 cubic metres per hour is about the average yield. However, many farm bores have fallen into disuse as a result of the Government's resumption of virtually all freehold land within the A.C.T., and because of the rapid expansion of urban growth. The Bureau of Mineral Resources has provided a bore-siting, groundwater-quality and yield-prediction service in the A.C.T. since the early 1950's and maintains a network of 48 observation bores which are monitored regularly on a long-term basis. Emphasis has shifted recently from predicting groundwater levels for rural landholders, to trying to establish the ground-water resources that are available for augmenting surface-water supplies for urban purposes. Data are now being collected on groundwater occurrences within the A.C.T. and environs for preparation by the Bureau of a 1:100,000 scale hydrogeologic map.

Many bores have been drilled in the Canberra area for determination of groundwater conditions for specific projects such as dam sites, sewer tunnels, deep foundations for large buildings or for feasibility studies for urban development. These bores are generally monitored for short periods only. Long-term monitoring of water infiltrating from refuse-disposal areas is planned to commence in 1977.

In 1974–75 a total area of 220 hectares was under irrigated culture in the A.C.T. The crop areas were orchards, 6 hectares; vegetables, 44 hectares; nurseries, 2 hectares; lucerne, 75 hectares; cereals, 10 hectares; and pastures accounted for 83 hectares. Of the total area irrigated, 158 hectares was irrigated from surface sources, 51 hectares from bores and 1 hectare from the reticulated water supply.

Control of irrigation and farm water supplies is exercised by the Conservation and Agriculture Branch of the Department of the Capital Territory. The Bureau of Natural Resources of the Department of National Resources provides technical advice on groundwater, and occasionally on run-off, to landholders.

Water conservation on farm holdings was shown to be deficient in the severe 1965–68 drought when stock were moved to areas outside the A.C.T. Improvements by the provision of additional or larger farm dams and of bores have been made in recent years.

CHAPTER 24

FORESTRY

Source of statistics

Statistics relating to total forest area have been derived from data presented to the Forestry and Wood-based Industries Development Conference, Canberra, 1974 by various authorities concerned with forestry administration and by private forestry companies. Other information on forested areas has been provided by the Forestry and Timber Bureau. Statistics of timber and by-products have been compiled from the annual factory collections undertaken by the Statisticians in the several States. Figures of production of gums, resins and tanning barks have been provided by the State forestry authorities. Data of imports and exports of forest products and timber products have been compiled by the Australian Statistician as part of the statistics of overseas trade. The figures shown relate, in general, to years ended 30 June.

Forestry in Australia

Objects of forestry

The main object of forestry authorities is to manage the forests of the country in a manner that will provide maximum benefits, both direct and indirect, for the community. The authorities aim to promote the multiple use concept in management under which forests remain in perpetuity as sources of valuable raw material, areas of natural beauty, sanctuaries for fauna and flora, and areas for scientific investigation and watershed protection. The provision of special protected areas such as forest parks for recreational use and for the conservation of plants and animals is an objective. Forestry also aims at improving existing forests and woodlands by properly controlled harvesting, by protection from such destructive agencies as fire, insects and diseases, and by inducing regeneration. The provision of a partial tree cover on denuded lands where this cover is necessary for protective purposes, and a complete cover when the land is more suited under forest than under other land use are further aims of forestry.

General account of forests and timbers

The area of land in Australia suitable for the production of commercial timber as a primary crop is very small in comparison with the size of the continent. Productive, or potentially productive, forests cover 42.5 million hectares, and of these 99 per cent are natural forests. 35 million hectares of the natural forests are dominated by eucalypts.

Eucalypts. The genus *Eucalyptus* is remarkable in that it includes some 500 known species, ranging in size from the mighty forest giants, mountain ash (*E. regnans*) of Victoria and Tasmania, and karri (*E. diversicolor*) of Western Australia, down to the small mallee species which inhabit vast areas of the inland. The habitats range from the inland plains to the high mountain areas in the Australian Alps, and from areas with the annual rainfall as low as 250 mm to those where it is 4,000 mm. Of the 500 species, only about 100 are used for sawmilling, and not more than 40 of these are exploited extensively.

The better class of eucalypt forest is concentrated mainly in the higher rainfall areas such as the east coast, the highlands of southern New South Wales, Victoria and Tasmania, and the south-western corner of Western Australia. The more important species include blackbutt (*E. pilularis*), tallowwood (*E. microcorys*), flooded gum (*E. grandis*), and red mahogany (*E. resinifera*) of New South Wales and Queensland; alpine ash (*E. delegatensis*) of New South Wales, Victoria and Tasmania; mountain ash (*E. regnans*), messmate (*E. obliqua*) and blue gum (*E. bicostata*) of Victoria and Tasmania; and karri (*E. diversicolor*) of Western Australia. For height and grandeur, mountain ash and karri are unequalled among the broadleaved trees of the world and are excelled only by a few North American coniferous (softwood) species.

In the coastal regions with lower rainfall the eucalypt forests contain many durable species such as the ironbarks, grey gums and bloodwoods of the east coast, and jarrah (*E. marginata*) and tuart (*E. gomphocephala*) of Western Australia. The spotted gum (*E. maculata*) occurring in New South Wales and Queensland is another example.

Along most of the inland streams and adjacent flood-plains there are riverain forests consisting mainly of river red gum (*E. camaldulensis*), a very durable tree which has supplied large quantities of sawn timber, railway sleepers and fence posts.

Eucalypts also occur in open forest and savannah woodland formations in areas receiving a reliable rainfall of about 250 to 500 mm per annum, as on the goldfields of Western Australia where salmon gum (*E. salmonophloia*), brown mallet (*E. astringens*) and wandoo (*E. wandoo*) occur. These trees are of considerable value for firewood, as mining timbers and for fencing. Minor forest products such as sandalwood, tan bark, essential oils, etc., also come from isolated areas in this type of country, and in the more arid areas.

Other broadleaved timbers (*hardwoods*). Broadleaved genera other than *Eucalpytus* cover a com paratively small portion of the forested land in Australia; however, the areas concerned provide a great variety of timbers suitable for a multitude of uses. There are two basic types of forest containing supplies of broadleaved timbers other than eucalypts, namely, the tropical and sub-tropical rainforests of coastal Queensland and New South Wales and the temperate rainforests of southern Victoria and Tasmania, both of which yield species known collectively as rainforest or brushwood species.

The tropical and sub-tropical rainforest along the eastern coast of Australia contains a large number of different species. Tropical rainforest occurs in northern Queensland in the vicinity of Cairns and on the Atherton Tableland, providing such well-known cabinet woods as Queensland maple (*Flindersia brayleana*), Queensland walnut (*Endiandra palmerstonii*) and the silky oaks. The sub-tropical rainforest found in southern Queensland and northern New South Wales yields the tulip oak, crab apple (*Shizomeria ovata*) and white beech (*Gmelina leichhardtii*). Coachwood (*Ceratopetalum apetalum*) and sassafras (*Doryphora sassafras*) occur in regions to the south near Dorrigo and have yielded valuable timber for many years.

Temperate rainforest which is to be seen in southern parts of Victoria and western Tasmania consists mainly of myrtle beech (*Nothofagus cunninghamii*), but produces also southern sassafras (*Atherosperma moschata*) and blackwood (*Acacia melanoxylon*).

Turpentine (*Syncarpia glomulifera*), an excellent harbour pile timber resistant to marine borer attack, and brush box (*Tristania conferta*), a superior structural and decking timber, are found in association with some eucalypts in the wetter rainfall areas on the north coast of New South Wales and in Southern Queensland.

Conifers (*Softwoods*). One of the most important species of native conifers is white cypress pine (*Callitris glauca*). The main cypress pine forests of commercial value occur in New South Wales and southern Queensland west of the Great Dividing Range. The trees are comparatively small, but the timber has particular value owing to its durability including resistance to termites. It is suitable for use as scantlings, flooring, linings, weatherboards, poles, and posts. As much of the area originally covered by cypress pine has been cleared for wheat farming and grazing, the production from the remaining State forests is now strictly regulated to ensure a continuous supply.

Another important native conifer is hoop pine (*Araucaria cunninghamii*), which occurs naturally in the sub-tropical rainforest of southern Queensland and northern New South Wales associated with tulip oak, crab apple, white beech, coachwood, and sassafras. The greater part of the original hoop pine forests has been exploited, but considerable areas have been replanted to this species in Queensland and, to a lesser extent, in New South Wales.

Other native conifers which have played a useful but minor part in the Australian timber industry include bunya and kauri pines (*Auracaria bidwillii* and *Agathis palmerstonii*) of Queensland, and celery-top, Huon and King William pines (*Phyllocladus asplenifolius*, *Dacrydium franklinii* and *Athrotaxis selaginoides*) of Tasmania. Kauri pine is found in the tropical rainforest of northern Queensland in association with non-eucalypt broadleaved trees, while bunya pine occurs in the sub-tropical rainforests. In the temperate rainforests of Tasmania celery-top, Huon and King William pines are found in association with myrtle beech, southern sassafras and blackwood.

Extent of forested areas

Estimates prepared for the Food and Agriculture Organisation World Forestry Inventory, 1970 gave the total area of forests plus other wooded areas as 137.7 million hectares. Resource data prepared for the Forestry and Wood-based Industries Conference, 1974 show the total area of forest as 42.5 million hectares based on a definition of forest which included plantations, native forest with an existing or potential mature height of 20 metres or more, and cypress pine forest in commercial use, regardless of height. The difference between the areas revealed by the two surveys is largely explained by the fact that the definition of 'forest' was changed considerably between the two reference dates. The following tables show classifications of total forest area in Australia by forest type and by ownership.

CLASSIFICATION OF FOREST AREAS BY FOREST TYPE, 30 JUNE 1971

(*Source:* Forwood Conference, 1974)(*a*)

('000 hectares)

Forest type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Rain forest	300	..	1,068	..	..	456	37	..	1,861
Eucalypt—									
Productivity(*b*) I	1,183	644	212	..	213	457	..	..	2,709
" " II	(*c*)3,678	4,582	1,361	..	2,777	1,838	..	(*c*)	14,237
" " III	8,348	559	3,382	..	36	..	..	..	12,325
Tropical eucalypt and paper bark	..	..	4,078	..	..	..	2,450	..	6,528
Cypress pine	1,908	..	1,673	..	..	..	777	..	4,358
Plantations(*d*)	107	109	99	88	40	26	1	13	484
Total forest area	**15,524**	**5,895**	**11,874**	**88**	**3,066**	**2,778**	**3,266**	**13**	**42,503**

(*a*) For further information on data contained in this table, *see* the Report of Panel 2 (Forest Resources) of the Forestry and Wood-based Industries Development Conference, 1974. (*b*) Eucalypt forest types have been grouped into three classes in descending order of productivity. (*c*) Eucalypt forest (probably of Productivity Class II) in the A.C.T. has not been separated from eucalypt forest in N.S.W. (*d*) As at 31 March 1972

CLASSIFICATION OF FOREST AREAS BY OWNERSHIP, 30 JUNE 1971

(*Source:* Forwood Conference 1974)

('000 hectares)

Ownership	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
State(*a*)	2,884	2,412	3,182	70	1,925	926	312	13	11,725
Other public(*b*)	(*c*)6,487	2,755	6,895	..	416	721	2,639	(*d*)	19,912
National parks(*e*)	(*c*)864	128	366	1	34	122	314	(*d*)	1,830
Private(*f*)	5,288	600	1,431	17	691	1,009	..	..	9,036
Total	**15,524**	**5,895**	**11,874**	**88**	**3,066**	**2,778**	**3,266**	**13**	**42,503**

(*a*) Publicly owned land, permanently reserved or dedicated primarily to timber production. (*b*) Publicly owned land, vacant or occupied under lease, not specifically secured for permanent timber production, but on which control of timber rests with the Crown. (*c*) Includes the A.C.T. (*d*) Areas in this category in the A.C.T. have been included in the New South Wales total. (*e*) Publicly owned land, permanently reserved for purposes other than timber production. (*f*) Privately owned land, and leasehold land, where the Crown has no control over timber rights.

Plantations

The indigenous forest of Australia does not contain adequate supplies of coniferous timber, and Australia's requirements have had to be met largely by imports. As a result of the planned policy of the forest services and of several private commercial organisations, the area of coniferous plantations, mainly of exotic species, is steadily increasing. In 1975 the rate of planting was over 35,000 hectares. It was natural that this aspect of forestry should receive earliest attention in South Australia, as this is the State most poorly endowed with natural forest. South Australia now has a large area of planted conifers, and for some years has been obtaining considerable quantities of timber from these plantations. Production is also increasing in other States, and the thinnings from their plantations are already supplying a significant volume of timber. At 31 March 1975, the total area of coniferous plantations was more than 565,000 hectares.

The total production of roundwood from Australia's coniferous plantations is now more than 2.6 million cubic metres per annum and is expected to increase substantially during the next decade.

A special article giving a detailed account of the history and development of coniferous plantations and of the characteristics of individual species is included in Year Book No. 59, page 880.

Broadleaved plantations (mainly *Eucalyptus ssp.*) comprise 33,400 hectares, a much smaller area than for the coniferous plantations. Plantations of ash eucalypts (including *E. delegatensis* and *E. regnans*) for pulpwood in Victoria, and brown mallet (*E. astringens*) for tan bark production in Western Australia make up a substantial proportion of the total broadleaved plantation area. The following tables show total area of plantations in Australia classified by species and by ownership.

AREA OF PLANTATIONS CLASSIFIED BY SPECIES, 31 MARCH 1975

(*Source:* Forestry and Timber Bureau)

(Hectares)

	N.S.W.(a)	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Coniferous plantations—									
Pinus radiata	114,900	119,000	2,400	87,100	23,000	35,000	..	12,900	394,400
Pinus pinaster	..	500	..	6,000	20,400	..	..	..	27,000
Pinus elliottii	(*b*)12,600	..	66,300	..	..	..	..	..	78,900
Pinus caribaea	..	..	7,500	..	..	..	(*c*)400	..	7,900
Araucaria species	1,400	..	36,800	..	..	..	..	..	38,300
Callitris intratropica	..	..	..	..	..	..	(*c*)1,900	..	(*c*)1,900
Other coniferous species	5,300	5,400	4,100	700	..	200	..	1,000	16,900
Total	*134,300*	*124,900*	*117,100*	*93,800*	*43,400*	*35,300*	*(c)2,300*	*13,900*	*565,200*
Broadleaved plantations—									
Eucalyptus species	12,200	12,600	(*d*)2,600	1,100	..	900	..	..	29,300
Populus species	2,000	400	..	..	..	..	..	..	2,500
Other broadleaved species	..	..	1,600	..	..	..	..	..	1,600
Total	*14,200*	*13,000*	*4,200*	*1,100*	..	*900*	..	..	*33,400*
Grand total	**148,500**	**138,000**	**121,400**	**94,900**	**43,400**	**36,200**	**(*c*)2,300**	**13,900**	**598,600**

(*a*) Private woodlets of less then 40 hectares are not included. (*b*) Includes some *Pinus taeda.* (*c*) As at 31 March 1974. (*d*) Includes approximately 400 hectares of native cabinet wood species.

AREA OF PLANTATIONS CLASSIFIED BY OWNERSHIP, 31 MARCH 1975

(*Source:* Forestry and Timber Bureau)

(Hectares)

Ownership(a)	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Coniferous plantations—									
State	107,700	63,000	94,200	75,600	36,700	25,000	(*c*)2,300	13,900	418,500
Other public	600	3,500	..	1,100	..	..	..	..	5,200
Private	(*b*)25,900	58,400	22,900	17,100	6,700	10,400	..	..	141,400
Total	*134,300*	*124,900*	*117,100*	*93,800*	*43,400*	*35,300*	*(c)2,300*	*13,900*	*565,200*
Broadleaved plantations—									
State	6,200	5,800	2,100	1,100	..	400	..	..	15,600
Other public	500	1,300	..	..	..	..	..	..	1,800
Private	(*b*)7,500	5,900	2,100	..	..	500	..	..	16,000
Total	*14,200*	*13,000*	*4,200*	*1,100*	..	*900*	..	..	*33,400*
Grand total	**148,500**	**138,000**	**121,400**	**94,900**	**43,400**	**36,200**	**(*c*)2,300**	**13,900**	**598,600**

(*a*) For definitions of the term 'State', 'Other public' and 'Private', *see* footnotes (*a*), (*b*) and (*f*) to the table Classification of Forest Areas by Ownership on page 897. (*b*) Private woodlets of less than 40 hectares are not included. (*c*) As at 31 March 1974.

Commonwealth Government loans to expand softwood plantations

The first steps in the creation of government plantations in Australia were taken in 1870 in South Australia. Planting commenced in 1876 and has continued except for war time interruption ever since. Small plantations were later established in other States, notably Victoria. Planting progressed at a steady rate between the two World Wars. After the Second World War, planting programs were recommenced, but at a rate insufficient to provide Australia's future requirements for softwood.

In February 1965 the Australian Forestry Council recommended that the rate of expansion of softwood timber plantings in Australia should be increased from their existing level of about 16,000 hectares a year to 30,000 hectares a year for the next thirty-five years. The recommendations envisaged a phased increase in the rate of Government plantings by the various State Governments up to a level of some 26,000 hectares per annum together with plantings by the Commonwealth Government in the Territories of 1,000 hectares per annum, and an average of at least 4,000 hectares per annum by private forest owners. The Council considered that such a program would make a major contribution towards meeting Australia's future requirements for softwood products.

In February 1966 the Commonwealth Government endorsed this recommendation and agreed, as a first step towards achieving the proposed annual target of 30,000 hectares, to provide financial assistance to each State, over a five-year period commencing 1 July 1966, to enable them to accelerate their rate of softwood plantings. The assistance, which was provided to the States under section 96 of the Constitution, took the form of long-term loans repayable over twenty-five years with repayments of principal and the payment of interest commencing ten years after the date of each advance.

The *Softwoods Forestry Agreements Act* 1967 authorised the Commonwealth Government to enter into agreements with each of the States to provide financial assistance by way of loans during the financial years 1966–67 to 1970–71 inclusive.

In February 1969 the Australian Forestry Council recommended a continuation of Federal financial assistance to the States for softwood timber planting for a further five-year period. The resulting *Softwood Forestry Agreements Act* 1972 authorised the Commonwealth Government to provide financial assistance to the States, by way of loans, during the financial years 1971–72 to 1975–76 inclusive. These loan funds are to be provided on the same terms and conditions as for the first program. Consideration is currently being given to whether the Commonwealth Government should give further financial assistance to the States in a third program.

Payments under the two Acts to all States have been as follows: 1966–67, $291,000; 1967–68, $3,456,000; 1968–69, $3,872,000; 1969–70, $4,814,000; 1970–71, $4,784,000; 1971–72, $389,338; 1972–73, $9,459,000; 1973–74, $4,875,000; 1974–75, $7,124,000; 1975–76, (estimated) $8,595,000.

Forest administration and research

Forestry and Timber Bureau. The functions of the Forestry and Timber Bureau were laid down in the *Forestry and Timber Bureau Act* 1930. They included forestry research and education, the study of timber supply, and advice to the Commonwealth Government on forestry matters. Following the transfer of the Australian Forestry School to the Australian National University in 1964 as the Department of Forestry in the University, the research functions of the Bureau were taken over by the Commonwealth Scientific and Industrial Research Organisation (C.S.I.R.O.) on 1 July 1975 as the nucleus of their new Division of Forest Research. The remaining non-research functions of the Bureau, which include policy advice formulation, economic studies and the collection and dissemination of information and statistics on forest resources and industry, are administered by the Department of Primary Industry.

Commonwealth Scientific and Industrial Research Organisation. The newly created Division of Forest Research covers a wide range of studies including the following: forest genetics, controlled environment, forest nutrition, forest botany, tree seeds, forest ecology, forest entomology and pathology, fire protection and watershed management. The Division maintains six regional establishments in the States and the Northern Territory. These research stations are run on a co-operative basis with State forest services and private forest companies or other Government instrumentalities. The Divisions of Building Research and Chemical Technology carry out a wide range of investigations relating to the properties of wood and the uses of wood and wood products. Research on processing logs and timber, solid and composite wood products, timber engineering, and the applications of wood in building is undertaken by the Division of Building Research. The Division of Chemical Technology was created in February 1974 following a reorganisation of the C.S.I.R.O. research effort in which the previous Division of Applied Chemistry ceased to exist as a separate entity. The research program of the new Division of Chemical Technology is directed towards the recycling of resources, utilisation of renewable resources, and the protection and conservation of natural resources. Problems of the pulp and paper industry, and bushfire research are receiving particular attention.

Most of the present forest products activities of both Divisions are conducted at the C.S.I.R.O. Forest Products Laboratory in South Melbourne. The Divisions provide assistance to individuals and industry, administer courses of instruction on timber properties and usage, and maintain co-operative projects with overseas authorities operating in the same fields.

Forestry in the Territories. The management of forests in the Australian Capital Territory is the responsibility of the Forests Branch of the Department of the Capital Territory. Forests in the Northern Territory are under the control of the Forestry Section of the Department of the Northern Territory.

Forestry activities of the States. Forestry on State-owned lands in the various States is the responsibility of the respective State Governments, but they do not exercise any control over forestry activities on private property. The powers and functions of State forest authorities are laid down under forest Acts and Regulations. In each State there is a department or commission to control and manage State forests. Its functions include the introduction of proper measures for the control and management of forest land; the protection of forest land; the conversion, marketing and economic utilisation of forest products; the securing of an adequate and permanent reservation of State forests; and the establishment and maintenance of coniferous forests to remedy the existing deficiency of conifers in Australia. All State forest services are actively engaged on research programs. Annual reports are issued by each State forest authority.

In addition to developing permanent forest reserves in each State, foresters are surveying all forested Crown lands with a view to obtaining dedications of new State forests to add to the permanent forest estate or to release for other uses areas unsuitable for forestry. In the States publicly owned land permanently reserved or dedicated primarily for timber production amounts to 11.7 million hectares, the timber on a further 19.9 million hectares not specifically reserved for permanent timber production being under the control of the Crown.

Private forestry. Privately owned lands contribute considerably to the total production from Australian forests. The most important areas of managed native forest in private ownership are the forests owned by pulp and paper companies. Schemes of financial assistance to individual land owners—designed primarily to encourage establishment and management of coniferous plantations—have been introduced by the Governments of New South Wales and Victoria.

The area of privately owned coniferous plantations is rapidly increasing, and here again the pulp and paper companies are very active. In step with the increase in afforestation programs, the number of professional foresters employed in private forestry enterprise is increasing, while several are engaged on research.

The area of plantations established by private companies and individuals is included in the table on page 898.

Forestry education

The Australian National University's Department of Forestry in Canberra and the School of Forestry of the University of Melbourne offer undergraduate courses leading to a Bachelor of Science degree in forestry. Universities in all States have facilities for post-graduate studies for forestry graduates. Foresters for the Forests Commission of Victoria are trained at a departmental Forestry School at Creswick, Victoria. States other than Victoria offer traineeships to students selected for university training in forestry. These traineeships support the students and meet their expenses throughout the four year university course. Successful graduates are appointed as forestry officers in the State Forest Services. The Commonwealth Government also offers forestry scholarships to cover the cost of university training in forestry for those selected. A limited number of post-graduate scholarships are also available.

The Australian Forestry Council

The Australian Forestry Council comprises the Ministers responsible for forestry in the six State Governments and the Commonwealth Government.

The Council is intended to provide the means for the mutual exchange between the State and Commonwealth Governments of information and views on forestry. It co-ordinates research into problems affecting the establishment, development, management, and fire protection of all forests, and the utilisation of forest products. It assists in co-ordinating the work of State and Commonwealth Governments and also private enterprise in the development of Australian forestry.

The Council is supported by a Standing Committee, consisting of the Director-General of the Forestry and Timber Bureau, the heads of each of the six State Forest Services, the Chief of the Division of Forest Research, C.S.I.R.O., and the Secretary of the Department of the Northern Territory.

Fire protection

The provision of adequate fire protection is one of the main problems facing forest and rural authorities. Government and private forestry organisations are responsible for the protection of about 21 million hectares of forest land, of which a relatively accessible area of 11 million nectares is given a high degree of protection, about 7 million hectares in the more inaccessible areas receive a lesser degree of protection, and about 3 million hectares are at present not protected. Other extensive forest areas consisting mainly of vacant Crown land, but including land under private ownership or leasehold, are either not protected or are given some degree of fire protection by rural fire-fighting organisations or Government-financed fire protection associations.

During the 1973–74 fire season a total of 508 fires were recorded over the area of 21 million hectares of forest land afforded either intensive or extensive protection by forest authorities. The area burnt by these fires totalled 32,000 hectares or 0.2 per cent of the area protected.

The number of fires and the area of native forest burnt during the last ten years is shown in the following table.

NUMBER OF FIRES AND AREA BURNT IN PROTECTED FORESTS(a)

(*Source:* Forestry and Timber Bureau)

Year	*Number of fires*	*Forest area burnt*	*Percentage of forest area burnt*
		'000 hectares	
1964–65	2,307	658	4.1
1965–66	1,865	188	1.2
1966–67	1,422	157	1.0
1967–68	1,754	305	1.9
1968–69	2,165	763	4.7
1969–70	905	53	0.3
1970–71	1,018	71	0.4
1971–72	1,195	185	1.1
1972–73	1,816	348	2.2
1973–74	508	32	0.2

(a) The area receiving protection has been taken as the 21 million hectares for which State forest services provide protection.

Very intensive fire protection is afforded to the coniferous plantation area of Australia. This area is increasing rapidly and the annual planting program is now between 25,000 and 30,000 hectares. During the 1973–74 fire season a total of 441 hectares was burnt, representing 0.09 per cent of the area of 493,000 hectares for which fire statistics are available.

The area of coniferous plantations burnt during the past ten years is shown in the following table.

CONIFEROUS PLANTATIONS AREA BURNT AND TOTAL AREA

(*Source:* Forestry and Timber Bureau)

Year	*Number of fires*	*Area burnt*	*Area of coniferous plantations(a)*	*Percentage of coniferous area burnt*
		hectares	'000 hectares	
1964–65	n.a.	1,267	225	0.56
1965–66		615	247	0.25
1966–67		187	267	0.07
1967–68		117	295	0.04
1968–69	39	909	316	0.29
1969–70	51	60	354	0.02
1970–71	40	568	402	0.14
1971–72	113	127	429	0.03
1972–73	138	326	451	0.07
1973–74	100	441	493	0.09

(a) This area does not include certain privately owned coniferous plantations for which fire statistics are not available.

Detailed information on fire protection is given in Year Book No. 55, 1969, pages 966–7.

Employment in forestry

In the following table details are shown of the number of persons employed by State forestry departments, the Department of the Capital Territory, the Department of the Northern Territory, the Forestry and Timber Bureau in the relevant States and Territories, and the private sector of the forestry industry at 30 June 1975. The table excludes staff of forestry training establishments.

PERSONS EMPLOYED IN FORESTRY(*a*), 30 JUNE 1975

Occupational group	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Professional staff—									
Foresters	209	253	117	62	63	76	13	43	836
Others	90	60	106	26	2	20	..	13	317
Field and other technical staff	86	339	119	57	289	215	40	54	1,199
Clerical staff	496	306	272	127	79	133	17	58	1,488
Labour(*b*)	1,305	1,708	1,818	396	569	623	83	112	6,614
Extraction(*c*)	3,486	1,096	2,450	304	763	2,104	10	69	10,282
Total	**5,672**	**3,762**	**4,882**	**972**	**1,765**	**3,171**	**163**	**349**	**20,736**

(*a*) The Forestry and Timber Bureau has provided figures for employment within its own organisation. (*b*) Staff engaged in silvicultural forest works, etc. (*c*) Staff engaged in felling, carting, etc. Includes direct employees only.

Log sawmilling and veneer and plywood, etc., manufacturing activities

Selected details of the operations of establishments engaged in log sawmilling and the manufacture of plywood, etc., are set out in the tables below. These details were compiled from the annual census of Manufacturing for 1973–74. For further details of the Manufacturing Census *see* Chapter 21, Manufacturing Industry.

MANUFACTURING ESTABLISHMENTS—LOG SAWMILLING (A.S.I.C. CLASS 2511)(*a*) SUMMARY OF OPERATIONS, 1973-74

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Establishments in operation at 30 June	No.	414	239	303	36	94	148	2	4	1,240
Employment(*b*)	,,	4,960	3,160	3,394	580	2,151	1,489	(*c*)	(*c*)	15,960
Turnover	$'000	86,638	56,822	50,370	11,794	30,246	24,450	(*c*)	(*c*)	264,708
Value added	,,	53,616	35,702	29,143	4,930	20,718	14,130	(*c*)	(*c*)	160,599
Fixed capital expenditure (outlay on fixed tangible assets less disposals)	,,	3,360	3,344	1,957	492	825	1,193	(*c*)	(*c*)	11,305

(*a*) Australian Standard Industrial Classification. *See* page 728. (*b*) Average over whole year; includes working proprietors. (*c*) Not available for publication.

MANUFACTURING ESTABLISHMENTS—PLYWOOD, VENEER AND MANUFACTURED BOARDS OF WOOD (A.S.I.C. CLASS 2513)(*a*): SUMMARY OF OPERATIONS, 1973-74

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Establishments in operation at 30 June	No.	40	12	28	7	3	3	..	..	93
Employment(*b*)	,,	2,931	883	2,155	(*c*)	(*c*)	401	..	..	7,727
Turnover	$'000	60,077	21,699	42,483	(*c*)	(*c*)	11,122	..	..	167,349
Value added	,,	28,264	9,042	20,383	(*c*)	(*c*)	5,677	..	..	78,070
Fixed capital expenditure (outlay on fixed tangible assets less disposals)	,,	3,259	4,425	1,599	(*c*)	(*c*)	236	..	..	10,522

(*a*) Australian Standard Industrial Classification. *See* page 728. (*b*) Average over whole year; includes working proprietors. (*c*) Not available for publication.

Forest production

FOREST PRODUCTION(*a*), 1974-75

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Production of logs for sawing, peeling, slicing or pulping—										
Broadleaved—										
Eucalypt and related species . . .	'000 m³	2,259	1,961	455	7	1,055	3,916	..	..	9,653
Rain forest species .	„	122	..	206	..	..	..	..	..	328
Coniferous—										
Indigenous forest conifers—										
Cypress . . .	„	137	..	184	..	..	..	..	..	321
Other . . .	„	..	..	47	..	..	11	..	..	58
Plantation grown conifers . . .	„	271	828	169	904	129	70	..	116	2,487
Total . .	„	**2,788**	**2,789**	**1,061**	**911**	**1,184**	**3,997**	..	**116**	**12,847**
Gross value of forest products(*b*)—										
Logs(*c*) . . .	$'000	38,522	42,575	18,829	13,548	12,041	46,233	6	1,080	172,833
Other forest products(*d*).	„	12,694	6,206	6,334	2,763	7,954	3,788	5	63	39,806
Total . .	„	**51,216**	**48,781**	**25,163**	**16,311**	**19,995**	**50,021**	**11**	**1,142**	**212,639**
Local value of forest products(*e*)—										
Total . .	„	**51,176**	**48,447**	**17,107**	**16,283**	**18,418**	**42,862**	**11**	**1,142**	**195,445**

(*a*) Excludes some production from private land thought to be relatively small, details of which are not available. (*b*) Gross production valued at principal markets. *See* the chapter Miscellaneous for a more detailed reference to the value of production of forestry, as well as a brief explanation of the terms used. (*c*) *See* footnote (*c*) to the table Forest Production: Australia, below. (*d*) Includes firewood, sleepers, transoms, girders, bridge timbers, mining timber, poles, piles, charcoal (forest production only), tanning bark, essential oils, eucalyptus leaves, crude rutin. (*e*) Gross production valued at place of production. *See* footnote (*b*) above.

FOREST PRODUCTION(*a*): AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Production of logs for sawing, peeling, slicing or pulping—						
Broadleaved—						
Eucalypt and related species .	'000 m³	7,088	7,606	8,381	9,423	9,653
Rain forest species . . .	„	363	370	396	316	328
Coniferous—						
Indigenous forest conifers—						
Cypress	„	330	333	350	346	321
Other.	„	66	71	80	61	58
Plantation grown conifers .	„	2,058	2,057	2,272	2,287	2,487
Total	„	**9,905**	**10,436**	**11,478**	**12,433**	**12,847**
Gross value of forest products(*b*)—						
Logs(*c*)	$'000	101,645	115,257	133,964	159,397	172,833
Other forest products(*d*) . .	„	35,523	35,921	36,610	33,946	39,806
Total	„	**137,168**	**151,177**	**170,574**	**193,344**	**212,639**
Local value of forest products(*e*)—						
Total	„	**126,173**	**138,809**	**154,919**	**176,213**	**195,445**

(*a*) Excludes some production from private land, thought to be relatively small, details of which are not available. (*b*) *See* footnote (*b*) to the table Forest Production, 1974–75, above. (*c*) Included in this category are amounts attributable to sawmillers who carry out their own logging activities as a secondary part of their operations. As such, the values are attributable to the sawmilling industry which is part of manufacturing industry. However, the amount has been included in this table so that the overall value of forest products might be shown. The amount in question was estimated to be $29.5 million in 1969–70 or 30.5 per cent of the total of $96.6 million. An estimate of the amount for subsequent years is not available. (*d*) Includes firewood, sleepers, transoms, girders, bridge timbers, mining timber, poles piles, charcoal (forest production only), tanning bark, essential oils, eucalyptus leaves, crude rutin. (*e*) Gross production valued at place of production. *See* footnote (*b*) to the table above.

Timber and timber products

Mill production of timber

Particulars of logs treated and the production of sawn, peeled and sliced timber by sawmills and other woodworking establishments are shown in the following table.

OUTPUT OF AUSTRALIAN-GROWN TIMBER: ALL MILLS(*a*), 1973-74

('000 cubic metres)

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*A.C.T.*	*Aust.(a*
Sawn, peeled or sliced timber produced from logs—								
Broadleaved . . .	859	681	275	10	(*b*)	(*b*)	..	2,563
Coniferous . . .	176	138	155	251	(*b*)	(*b*)	15	773
Total timber produced .	**1,035**	**819**	**430**	**260**	**403**	**374**	**15**	**3,337**

(*a*) Includes Northern Territory. (*b*) Not available for publication. Included in total.

AUSTRALIAN-GROWN LOGS SAWN AND TIMBER PRODUCED, ALL MILLS AUSTRALIA

('000 cubic metres gross hoppus)(*a*)

	1968–69	*1969–70*	*1971–72*	*1972–73*	*1973–74*
Logs sawn—					
Broadleaved	5,335	5,260	5,125	5,375	n.a.
Coniferous	1,288	1,304	1,457	1,565	n.a.
Total logs sawn . . .	**6,623**	**6,564**	**6,582**	**6,940**	**n.a.**
Sawn, peeled or sliced timber produced from logs above—					
Broadleaved	2,620	2,672	2,584	2,561	2,563
Coniferous	763	714	782	848	773
Total timber produced . .	**3,383**	**3,386**	**3,367**	**3,408**	**3,337**

(*a*) Gross hoppus measure is approximately 78.5 per cent of the true volume.

In addition to the mill production of timber shown in the preceding tables, a large quantity of hewn and round timber, e.g. sleepers, piles, poles, fencing timber, timber used in mining and fuel, is obtained directly from forest and other areas. Information in respect of the value of this output may be found in the tables dealing with forest production on page 903.

Veneers, plywood, etc.

Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. In recent years this has been considerably extended, since plywood manufacture has allowed the use of some species unsuitable for sawing. Special attention has been paid to ensure that logs suitable for peeling are diverted to ply factories.

PLYWOOD PRODUCED: AUSTRALIA

('000 square metres: 1mm basis)

State	*1968–69*	*1969–70*	*1971–72*	*1972–73*	*1973–74*
New South Wales	31,452	35,062	32,080	36,047	40,290
Queensland	37,781	44,420	41,110	78,124	40,108
Other States	33,823	35,419	30,956		30,592
Australia	**103,056**	**114,901**	**104,146**	**114,171**	**110,990**

Of the total plywood produced in 1973–74, 46,956,072 square metres (mm basis) were classed as 'Commercial', 51,687,250 as 'Waterproof', 4,423,113 as 'Case', and 7,924,018 as 'Sliced fancy'.

During 1973–74, 340.5 million square metres (mm basis) of veneers were produced by the rotary process for the manufacture of plywood. In addition, 6.6 million square metres of sliced veneers were produced.

Manufactured boards

Particle board, resin bonded, amounted to 24,424,299 square metres during 1973–74.

Woodchips

Woodchips are manufactured from sawmill waste and other timber otherwise of little or no commercial value. Their primary use is the production of wood pulp. The recently established woodchip industry in Australia at present produces only for export to Japan, although there are long-term plans for the Australian production and export of wood pulp made from woodchips.

There are four companies, three in Tasmania and one in New South Wales, which operate chipping mills and which have entered into agreements to export woodchips to Japanese pulp mills. The contract covering the export of woodchips from New South Wales, spanning a 20 year period, allows for an annual export of 610,000 tonnes of chips; the total quantity under contract being 3.4 million tonnes. Exports from Tasmania are covered by four contracts, ranging in length from 5½ to 15 years, and involving a total quantity of 22.2 million tonnes. The Tasmanian contracts involve annual shipments ranging from 310,000 to 710,000 tonnes. It is expected that by 1988, these four projects will export a total of 30 million tonnes of woodchips to Japan valued at about $460 million. All four companies had commenced exports by 1972. Supplies of timber for chipping will come from State and privately owned forest lands, and from sawmill residues.

In addition to the above projects, a 15 year contract has been concluded between a Western Australian company and Japanese paper makers for the supply of up to 760,000 tonnes of woodchips per annum, valued in total at about $200 million, from Western Australia.

Wood pulp and paper

Wood pulp. During 1973–74 wood pulp production was 616,580 tonnes of chemical, mechanical and other pulp. During the previous year production was 532,492 tonnes.

Paper and paper board. Paper and paper board are manufactured in all States but the greater part of the industry is in New South Wales, Victoria and Tasmania. A wide variety of paper and paper board is produced in Australian mills. The table below gives details of the production of some of the principal items.

PRODUCTION OF PAPER PRODUCTS: AUSTRALIA

(tonnes)

Type of paper	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Newsprint	181,477	199,054	204,075	196,405
Blotting	443	(*a*)	(*a*)	(*a*)
Duplicating	14,594	(*a*)	(*a*)	(*a*)
Printing and writing	126,367	138,124	173,973	159,715
Wrapping	283,949	299,891	347,745	284,911
Paper felts	1,276	989	844	417
Paper boards	382,033	411,246	443,905	373,639

(*a*) Information not available for publication.

Imports

IMPORTS OF FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS AUSTRALIA

		Quantity			*Value ($'000 f.o.b.)*		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Crude wood, timber and cork—							
Wood waste and charcoal		..	..	..	13	13	26
Wood in the rough or roughly squared	'000 m^3	103	104	43	3,197	5,002	1,777
Wood shaped or simply worked—							
Railway or tramway sleepers	”	..	..	13	..	..	1,863
Timber, sawn lengthwise, sliced or peeled, but not further prepared, of a thickness exceeding 5 mm—							
Conifer—							
Douglas fir	”	467	461	383	25,576	37,931	30,097
Hemlock and balsam	”	103	165	66	4,269	10,929	4,692
Radiata pine	”	53	50	39	2,027	2,551	2,594
Redwood	”	10	18	3	1,073	2,636	450
Western red cedar	”	83	109	86	6,229	13,120	9,056
Other	”	34	27	24	2,333	2,236	(*a*)2,066
Total conifer	”	*750*	*830*	*784*	*41,507*	*69,403*	*48,955*
Non-conifer(*b*)	”	295	380	268	19,543	34,702	23,795
Timber (including blocks, strips, etc.), planed, tongued, grooved, rebated, etc., but not further manufactured—							
Conifer	'000 m^3	24	23	29	1,668	2,118	3,405
Non-conifer	”	55	35	38	2,033	4,172	4,841
Cork, raw and waste		..	..	..	293	482	623
Selected items of forest origin, other than crude wood, timber and cork—							
Tanning extracts of vegetable origin	tonnes	2,262	4,247	2,468	465	971	707
Wood and cork manufactures (except furniture)—							
Veneers, plywoods, 'improved' or reconstituted wood and other wood, worked, n.e.s.		..	..	..	11,622	22,629	20,892
Wood manufactures n.e.s. (household utensils, domestic utensils, building carpentry, etc.)		..	..	..	6,701	10,503	12,027
Cork manufactures		..	..	..	1,968	2,827	4,864

(*a*) Includes a value of $5,700 for which no quantity has been included. (*b*) Total values for this item for 1972–73, 1973–74 and 1974–75 include values of $212,000, $100,000, and $181,000 respectively, for which no quantities have been included.

Exports

EXPORTS OF AUSTRALIAN FOREST PRODUCTS, TIMBER AND TIMBER PRODUCTS(a) AUSTRALIA

		Quantity			*Value ($'000 f.o.b.)*		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
Crude wood, timber and cork—							
Wood waste and charcoal (including shell and nut charcoal)	'000 m^3	..	..	..	3	3	44
Pulpwood	„	..	6	45	..	562	1,139
Wood in the rough or roughly squared	„	7	7	13	277	607	629
Wood, shaped or simply worked—							
Railway sleepers	„	30	14	38	2,489	1,183	3,511
Timber, sawn lengthwise, sliced or peeled, but not further prepared, of a thickness exceeding 5 mm—							
Conifer	„	2	1	1	131	192	228
Non-conifer—Jarrah	„	5	15	4	397	1,101	350
Other	„	26	26	18	2,745	3,407	2,601
Timber (including blocks, strips and friezes for parquet or wood block flooring, not assembled), planed, tongued, etc.—							
Conifer	„	7	2	1	278	214	216
Non-conifer	„	10	5	9	281	845	388
Cork, raw and waste	tonnes	2	5	5	3	5	12
Selected items of forest origin other than crude wood, timber and cork—							
Natural gums, resins, gum-resins, balsam and lacs	„	611	345	392	218	155	151
Duboisia leaves	„	1,026	n.a.	n.a.	915	858	1,228
Eucalyptus oil	„	118	117	104	194	407	611
Wood and cork manufactures (except furniture)—							
Veneers, plywood boards, etc.—							
Wood sawn lengthwise, sliced or peeled, not further prepared, veneer sheets and sheets for plywood, of a thickness not exceeding 5 mm	'000 m^2	728	490	271	477	347	235
Plywood, blockboard, laminated wood products, inlaid wood and marquetry, cellular wood panels—							
Plywood	„	645	595	387	946	970	1,003
Other	„	91	277	111	68	312	262
Reconstituted wood, in panels, sheets or strips, and improved wood		..	..	..	472	488	256
Wooden beadings and mouldings		..	..	..	72	45	111
Wood simply shaped or worked, n.e.s.		..	..	..	73	138	32
Wood chips	tonnes	1,553,334	2,663,852	2,565,614	23,040	39,748	46,437
Wood manufactures n.e.s.		..	..	..	925	852	981
Cork manufactures n.e.s.		..	..	..	128	300	433

(a) Excludes re-exports.

CHAPTER 25

FISHERIES

Further information on subjects dealt with in this chapter is contained in the annual statistical bulletins *Fisheries* (10.8 and 10.9).

Fisheries resources and their commercial exploitation

Fish

Approximately 2,000 species of marine and freshwater fish occur in and around Australia, about forty of which support substantial commercial fisheries. Most fishing is confined to waters over the continental shelf on the populous eastern and south-eastern seaboard, including Tasmania and South Australia, and off the south-western corner of the continent. As in other countries, fisheries in Australia may be divided into estuarine fisheries, located in the tidal waters of rivers and coastal lakes, beaches and bays; pelagic fisheries, which exploit species inhabiting the surface layers of the open ocean; and demersal fisheries, which fish the bottom layers of the sea. Estuarine fisheries produce considerable quantities of mullet (mainly *Mugil cephalus*), bream (*Acanthopagrus spp.*) and, in northern Australia, the valuable giant perch (*Lates calcarifer*). Important freshwater fisheries in New South Wales, Victoria and South Australia include those for Murray cods (*Maccullochella spp.*), golden perch (*Plectroplites ambiguus*) and eels (*Anguilla australis*). Rainbow trout are farmed in Tasmania. Important pelagic fisheries include those for Australian 'salmon' (*Arripis trutta*), southern bluefin tuna (*Thunnus maccoyii*), snoek (*Leionura atun*), mackerel (*Scomber amorus*), and clupeoids (*Sardinops neopilchardus* and *Engraulis australis*). Demersal fisheries include those for snapper (*Chrysophrys auratus*), whiting (*Sillaginidae*) and from tropical waters the so called 'cods' (*Epinephelus*, etc.). Trawl fisheries off New South Wales and Victoria yield species such as flathead (*Neoplatycephalus* and *Trudis spp.*), morwong (*Nemadactylus spp.*) and John Dory (*Zeus faber*). The previously valuable fishery for edible school and gummy shark (*Galeorhinus australis* and *Mustelus antarcticus*) in south-eastern Australia declined significantly in the year 1972–73 because of the discovery of a high mercury content in large school shark but production and prices have since risen, although production has not attained its former level. A fishery for clupeoids in the Bass Strait which supplies the raw material for a fish meal plant at Lakes Entrance, Victoria, is the only established 'industrial fishery' in Australia, but several other exploratory purse seine ventures aimed at production of clupeoids and jack mackerel (*Trachurus declivis*), including a fish meal plant at Triabunna, have been established in south-eastern Australia recently.

Crustaceans

The western and southern rock lobsters (*Panulirus longipes cygnus* and *Jasus novaehollandiae*) which are taken on rocky reefs around the southern half of Australia, provide the most valuable fishery in Australia. Prawns (*Penaeus* and *Metapenaeus spp.*) are taken in estuarine, coastal and offshore waters of all States except Tasmania. This fishery has grown rapidly in recent years, especially in northern Australia. Bay lobsters (*Thenus* and *Ibacus spp.*) are taken incidentally to prawn trawling operations. Crabs (*Scylla and Portunus spp.*) are taken mainly in Queensland, New South Wales and Western Australia.

Molluscs (edible)

Naturally occurring oysters are harvested in all States; and in New South Wales and Queensland the Sydney rock oyster (*Crassostrea commercialis*) is cultured commercially. The introduction of the Pacific oyster (*Crassostrea gigas*) in Tasmania and, recently, South Australia provides a limited supply in those States. Following a serious decline in catches in the scallop (*Pecten meridionalis*) fishery based on stocks in Port Phillip Bay, Victoria, new offshore beds were located in southern New South Wales, eastern Victoria, northern Tasmania and south-western Western Australia. However, substantial fluctuations in abundance has resulted in erratic variation in production from year to year, and only the Victorian and Tasmanian beds are currently producing. A fishery based on the saucer scallop (*Amusium balloti*) developed, then declined, in another area of Western Australia, and there is a similar though more stable fishery in Queensland. An important abalone fishery has been developed since 1964 in south-east Australia with Tasmania, Victoria and South Australia providing the bulk of the catch. Mussels (*Mytilus planulatus*) are harvested in Victoria, and a fishery for squid developed in the Derwent River estuary at Hobart in 1972–73. Other small quantities of cephalopods, mainly squid, are produced in many localities.

Pearl-shell and trochus-shell

The shell of the Australian species of pearl oyster (*Pinctada maxima*) is taken from various localities in the tropical waters of Australia from Broome in Western Australia to Cairns in Queensland for the manufacture of buttons, knife handles, etc. Live pearl-shell is used for pearl culture, *Pinctada maxima* being capable of producing pearls which are the largest in the world and which command top market prices. Trochus-shell is found mainly on coral reefs off the Queensland coast, although small quantities occur in Western Australia.

Whales

The Australian whaling industry formerly exploited the baleen (humpback) whales during their winter migrations along the east and west coasts of Australia. However, owing to the total prohibition placed on their capture by the International Whaling Commission in 1963, Australian whaling is now confined to the sperm whale (*Physeter catodon*) which has been taken in the southern waters of Western Australia since 1955. Processing operations were carried out by several shore stations, but now only one station at Albany, Western Australia, is still operating.

General

A map showing Australia's principal ports and generalised localities of the fishery resources under exploitation appears on plate 56, page 912. Detailed information on the history of the development of fisheries industries in Australia is given in Year Book No. 55, pages 976–7.

Fisheries administration and research

The Constitution of the Commonwealth (Section 51 (x)) assigns to the Commonwealth Government power to legislate for fisheries in Australian waters beyond territorial limits, the residual power in respect of waters within territorial limits (including inland waters) resting with the States. The Commonwealth Government has made similar arrangements for each of its Territories. Each State and Territory has legislation regulating fisheries in waters within its jurisdiction. Persons taking fish for sale, and their boats, are required to be licensed, and provision is made for management of the fisheries.

The Commonwealth Government laws regulating the fisheries are the *Fisheries Act* 1952, the *Continental Shelf* (*Living Natural Resources*) *Act* 1968 and the *Whaling Act* 1960. Each of these applies in accordance with the Commonwealth Government's fishery power under the Constitution.

Fisheries Act

This Act requires persons engaging in fishing and boats used for fishing to be licensed and their equipment for taking fish to be registered if the purpose of the fishing is commercial. It also provides for management and conservation of the fisheries. The Act applies to Australian residents and their boats in waters proclaimed under the Act and, since 1968, to foreign boats and their crews in the zone of waters extending 12 miles from the baselines of the territorial sea but excluding waters within territorial limits, where State law applies.

Continental Shelf (Living Natural Resources) Act

This Act implements in Australian law the sovereign rights, conferred on Australia in respect of the organisms belonging to sedentary species (that is, organisms which, at the harvestable stage, either are immobile on or under the seabed, or are unable to move except in constant physical contact with the seabed or the subsoil) on the continental shelf. The continental shelf comprises the seabed and subsoil of the submarine areas adjacent to the coast but outside the territorial sea to a depth of 200 metres, or beyond that depth where the depth of the superjacent waters admits of the exploitation of the natural resources of the area, by the Convention on the Continental Shelf, Geneva, 1958. The Act requires the licensing of persons searching for and taking sedentary organisms, of boats used to search for and take sedentary organisms, and of persons employing divers, trial divers and divers' tenders in taking sedentary organisms, if such activities are carried out in controlled areas of the continental shelf of Australia or the Territories for a commercial purpose. Provision is made for proclamation of sedentary organisms to which the Act applies, for the establishment of controlled areas of continental shelf in respect of specified sedentary organisms, and for the management and conservation of sedentary organisms in controlled areas (the last of these applying to all persons whether the purpose of the taking of the sedentary organism was commercial or not). The Act applies to all persons including foreigners, and to all boats including foreign boats.

Whaling Act

This Act implements in Australian law the obligations imposed on Australia by virtue of our adherence to the International Convention for the Regulation of Whaling, Washington, 1946. The Act requires the licensing of factories engaged in treating whales and of ships (and aircraft) used for taking whales. It also provides for the management and conservation of whale stocks.

Administration

Australian fisheries are administered by the authority having jurisdiction over the waters concerned. In inland waters and in waters within territorial limits, administration is the responsibility of the State or Territory fisheries authority. In proclaimed waters, and on the continental shelf beyond territorial limits, administration is the responsibility of the Commonwealth Government which, by agreement, has delegated to State fisheries authorities the necessary authorities for day-today administration of the Acts.

The administration of the fisheries is directed to a number of objectives, of which the two most important are conservation of the living resources in order to ensure their ability to sustain a maximum yield consistent with economy in their exploitation, and the orderly conduct of the fishing industry. Fishery resources are common property and apart from fisheries such as those for rock lobster and abalone, where the numbers of boats and the quantities of fishing gear are controlled, the only other restrictions on the entry of boats into the Australian fishing industry are those relating to foreigners, and to processing and carrying boats in the northern prawn fishery. Management measures have been introduced in several fisheries to provide controls such as minimum sizes, closed areas, closed seasons and regulation of the types of fishing gear that may be used.

The Fisheries Development Trust Account (established under the *Fishing Industry Act* 1956) and the Fishing Industry Research Trust Account (established under the *Fishing Industry Research Act* 1969) are available to support financially, projects of kinds consistent with the purposes of those Acts for the development and management of the fisheries and fishing industry. The former is supported by the proceeds of the sale of the assets of the Australian Whaling Commission. The latter is a matching fund into which is paid each year an appropriation from Commonwealth Government Revenue equal to amounts collected from the fishing industry by the State Fisheries Authorities and expended by the States for the same purposes.

Research

The main aim of fisheries research in Australia is to provide a background of biological, technical and economic information which will provide guidance for the efficient and rational utilisation of fisheries resources. To this end much of the research already undertaken has been directed at formulating recommendations for management of various fisheries. Research work is also carried out which is expected to lead to the development of new fisheries, the expansion of under-exploited fisheries, greater economy in operations and the use of more efficient equipment and methods.

Organisations in Australia at present engaged in research into fisheries matters are:

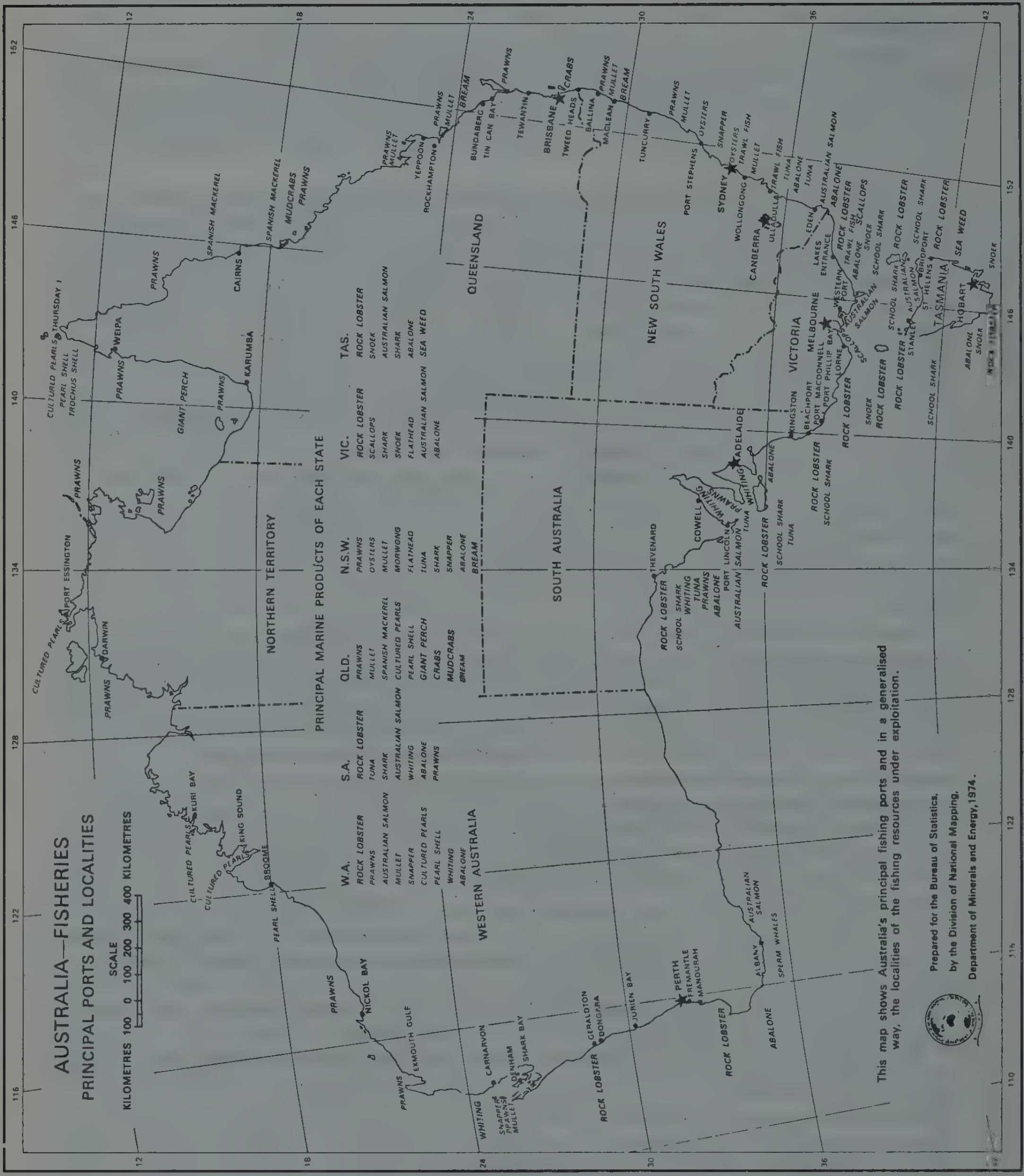
(i) C.S.I.R.O. Division of Fisheries and Oceanography, with its headquarters and main laboratory at Cronulla, N.S.W. (fisheries science and oceanography);

(ii) C.S.I.R.O. Division of Food Research; main laboratories located at Ryde, N.S.W. (handling, storage, processing and transportation of fish);

(iii) State fisheries departments (fisheries laboratories have been established in Perth, Hobart, Melbourne, Sydney and Brisbane; research vessels are operated by New South Wales, Victoria, Western Australia and Tasmania; the Department of the Northern Territory has a small scientific section at Nhulunbuy);

(iv) Fisheries Division, Department of Primary Industry, Canberra (economic and management research, gear technology, extension and education service); and

(v) private fishing companies (surveys of fisheries resources, research into handling and processing).


AUSTRALIA—FISHERIES
PRINCIPAL PORTS AND LOCALITIES
SCALE
KILOMETRES 100 0 100 200 300 400 KILOMETRES
PRINCIPAL MARINE PRODUCTS OF EACH STATE
WESTERN AUSTRALIA
NORTHERN TERRITORY
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
CULTURED PEARLS
PEARL SHELL
TROCHUS SHELL
THURSDAY I
WEIPA
PRAWNS
CAIRNS
SPANISH MACKEREL
MUDCRABS
KARUMBA
GIANT PERCH
PORT ESSINGTON
DARWIN
KURI BAY
KING SOUND
BROOME
NICKOL BAY
EXMOUTH GULF
CARNARVON
DENHAM
SHARK BAY
WHITING
SNAPPER
MULLET
GERALDTON
DONGARA
ROCK LOBSTER
JURIEN BAY
PERTH
FREMANTLE
MANDURAH
ABALONE
ALBANY
SPERM WHALES
AUSTRALIAN SALMON
THEVENARD
SCHOOL SHARK
TUNA
COWELL
PORT LINCOLN
ADELAIDE
KINGSTON
BEACHPORT
PORT MACDONNELL
PORT PHILLIP BAY
LORNE
MELBOURNE
WESTERN PORT
SCALLOPS
LAKES ENTRANCE
EDEN
ULLADULLA
CANBERRA
WOLLONGONG
SYDNEY
OYSTERS
TRAWL FISH
PORT STEPHENS
TUNCURRY
MACLEAN
BALLINA
TWEED HEADS
BRISBANE
CRABS
TEWANTIN
TIN CAN BAY
BUNDABERG
BREAM
ROCKHAMPTON
YEPPOON
SNOEK
SEA WEED
BRIDPORT
ST HELENS
HOBART
STANLEY

W.A.	S.A.	QLD.	N.S.W.	VIC.	TAS.
ROCK LOBSTER	ROCK LOBSTER	PRAWNS	PRAWNS	ROCK LOBSTER	ROCK LOBSTER
PRAWNS	TUNA	MULLET	OYSTERS	SCALLOPS	SNOEK
AUSTRALIAN SALMON	SHARK	SPANISH MACKEREL	MULLET	SHARK	AUSTRALIAN SALMON
MULLET	AUSTRALIAN SALMON	CULTURED PEARLS	MORWONG	SNOEK	SHARK
SNAPPER	WHITING	PEARL SHELL	FLATHEAD	FLATHEAD	ABALONE
CULTURED PEARLS	ABALONE	GIANT PERCH	TUNA	AUSTRALIAN SALMON	SEA WEED
PEARL SHELL	PRAWNS	CRABS	SHARK	ABALONE	
WHITING		MUDCRABS	SNAPPER		
ABALONE		BREAM	ABALONE		
			BREAM		

This map shows Australia's principal fishing ports and in a generalised way, the localities of the fishing resources under exploitation.

Prepared for the Bureau of Statistics,
by the Division of National Mapping,
Department of Minerals and Energy, 1974.

PLATE 56

Collection and presentation of fisheries statistics

Source and basis of statistics

Statistics presented in this chapter have been collected by a number of authorities. The various State fisheries authorities have supplied, through the Deputy Commonwealth Statisticians in the States, the details of employment, boats, equipment, and production of the general fisheries. The Fisheries division of the Department of Primary Industry has supplied particulars of the whaling industry and pearl-shell fishery. Statistics of the processing of general fisheries products and of overseas trade in the products of fishing and whaling have been compiled in the Australian Bureau of Statistics.

The statistics refer, in general, to financial years. However, statistics of pearl and trochus shell fishing, pearl culture operations and whaling refer to the season ended in the calendar year shown. For convenience of presentation, statistics of production of pearl and trochus shell have been assigned to financial years in the tables which follow. All overseas trade information refers to financial years.

In the preparation of Australian fisheries production statistics the quantities of individual products are generally in terms of the form in which they are taken from the water. For example, the statistics of fish production published in this chapter are in terms of 'estimated live weights' which are calculated from landed weights by using conversion factors for each species in each State. These conversion factors allow for the fact that the quantities of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Crustaceans are reported on an 'estimated live weight' basis and molluscs (edible) on a 'gross (in-shell) weight' basis. The figures of pearl-shell and trochus-shell refer to the actual quantities of dry shell for sale and exclude the weight of the fish.

Boats and equipment used in fisheries

Fish, crustaceans and molluscs (edible)

The boats used for the estuarine fisheries are mostly small vessels, propelled by diesel or petrol engines of low power. The offshore vessels range up to 40 metres in length and are almost invariably powered by diesel engines. Most of them have either insulated holds and carry ice, or are equipped with dry or brine refrigeration. Some rock lobster vessels are fitted with wells in which the catch is kept alive. About 25 per cent of the vessels registered in Australia for commercial fishing are over 10 metres in length. Recently, a number of well equipped, double rigged, prawn trawlers of 20 metres to 25 metres in length with large refrigeration capacity have been built for the rapidly developing northern prawn fisheries.

The following are the types of equipment most commonly used in the main fisheries: *mullet*, beach seine, gill net; *shark* (edible), long-lines, gill net; *Australian salmon*, beach seine; *snoek*, trolling lines; *flathead*, Danish seine, otter trawl; *snapper*, long-lines, traps, gill net, hand-line; *morwong*, Danish seine, otter trawl, traps; *whiting*, handlines, Danish seine, beach seine, gill net; *garfish*, beach seine; *mackerel*, trolling lines; *tuna*, pole and live-bait, trolling lines (lampara nets and purse seines are used for taking live bait for tuna); *prawns*, otter trawl, beam trawl, beach seine net; *rock lobster*, pots, traps; *scallops*, dredge, otter trawl; *abalone*, diving using hookah gear; and *pilchards*, *anchovies*, *jack mackerel* and *striped tuna*, purse seine.

Pearls, pearl-shell and trochus-shell

Ketch-rigged luggers about 15 metres long which carry crews of eight to fourteen members are used for pearl-shell fishing in northern Australia.

Whaling

The whaling industry is highly mechanised. Standard equipment includes aircraft to locate whales, diesel-powered catchers of about 30 to 40 metres in length, and tow boats.

Boats and equipment employed by industry

The following two tables show details of boats and equipment engaged in the taking of fish, crustaceans and edible molluscs, pearl-shell and trochus-shell, and the number of chasers and stations engaged in whaling operations. The reservations mentioned below regarding the use of employment information are also applicable to these tables. Boats engaged in more than one industry are classified to their main activity.

FISHERIES: BOATS AND EQUIPMENT; WHALING STATIONS, 1974-75

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
General fisheries—									
Boats	No.	2,209	772	2,447	1,824	1,588	616	194	9,650
Value of boats and equipment	$'000	20,541	11,103	44,847	36,601	37,672	14,086	24,027	188,877
Edible oyster fisheries—									
Boats	No.	1,812	..	n.a.	1	5	n.a.	..	(*a*)1,818
Value of boats and equipment	$'000	4,469	..	n.a.	1	6	n.a.	..	(*a*)4,476
Pearl-shell and trochus-shell—									
Boats(*b*)	No.	..	..	7	..	10	..	3	20
Whaling(*b*)—									
Chasers	No.	..	..	..	..	3	..	..	3
Stations operating	,,	..	..	..	..	1	..	..	1

(*a*) Incomplete: *see* individual States. (*b*) *Source:* Commonwealth Department of Primary Industry.

FISHERIES: BOATS AND EQUIPMENT, WHALING STATIONS, AUSTRALIA

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General fisheries—						
Boats	No.	9,322	9,591	10,760	10,532	9,650
Value of boats and equipment	$'000	79,711	(*a*)80,097	114,188	141,819	188,877
Edible oyster fisheries—						
Boats	No.	(*b*)1,829	(*b*)1,884	(*c*)1,710	(*b*)1,899	1,818
Value of boats and equipment(*c*)	$'000	1,844	2,843	3,734	4,133	4,476
Pearl-shell and trochus-shell—						
Boats(*d*)	No.	28	23	17	21	20
Whaling(*d*)—						
Chasers	No.	3	3	3	3	3
Stations operating	,,	1	1	1	1	1

(*a*) Incomplete; excludes South Australia. (*b*) Incomplete; excludes Tasmania. (*c*) Incomplete; excludes Queensland and Tasmania. (*d*) *Source:* Commonwealth Department of Primary Industry.

Employment in fisheries

Classification of registered commercial fishermen by industry

The following two tables are derived mainly from the licensing records of the various State fisheries authorities. Because the definitions and licensing procedures used by these authorities are not uniform the statistics should not be used to compare the relative productivities of fishing industries in the various States. Persons engaged in more than one industry are classified according to their main activity, and so may be classified differently from one year to the next.

PERSONS EMPLOYED ON FISHING BOATS, 1974-75(*a*)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
General fisheries	3,224	1,533	5,054	3,007	3,241	1,343	638	18,040
Edible oyster fisheries	1,434	..	n.a.	6	4	n.a.	..	(*b*)1,444
Pearl-shell and trochus-shell(*c*)	..	..	94	..	90	..	22	206
Whaling(*c*)—								
At sea	..	..	..	..	51	..	..	51

(*a*) For all States except Western Australia, the figures for general fisheries refer to number of persons (including skippers) reported as usually employed on boats. Persons reported as usually employed on more than one boat for a particular year are counted more than once for that year. For Western Australia, the figure for general fisheries refers to number of licensed commercial fishermen. (*b*) Incomplete; excludes Queensland and Tasmania. (*c*) *Source:* Commonwealth Department of Primary Industry.

PERSONS EMPLOYED ON FISHING BOATS: AUSTRALIA(*a*)

Industry	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
General fisheries(*b*)	16,279	17,594	19,208	19,072	18,040
Edible oyster fisheries	(*c*)1,596	(*d*)1,402	(*d*)1,318	(*c*)1,620	(*d*)1,444
Pearl-shell and trochus-shell(*e*)	416	287	233	193	206
Whaling(*e*)—					
At sea	51	51	51	56	51

(*a*) *See* foonote (*a*) to the table 'Persons Employed on Fishing Boats, 1974–75' previous page. (*b*) A break in comparability of figures in this series occurred in 1971–72, due to a change in basis of counting in South Australia. (*c*) Incomplete; figure for Tasmania is not available. (*d*) Incomplete: excludes Queensland and Tasmania. (*e*) *Source*. Commonwealth Department of Primary Industry.

Production, processing and domestic marketing of fisheries products

Value of fisheries production

The following table shows the gross value and local value of fishing and whaling production by States. Because the value of materials used in the course of production is not available for all States it is not possible to show a comparison of net values. (*See also* the chapter Miscellaneous for an explanation of the value terms used.)

FISHERIES: GROSS AND LOCAL VALUE OF PRODUCTION
($000)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
				GROSS VALUE				
1970–71	15,329	7,310	10,985	9,236	25,127	5,116	4,132	77,235
1971–72	18,970	9,507	11,382	12,380	30,817	5,929	2,793	91,776
1972–73	21,165	11,471	(*a*)13,375	15,759	28,158	5,739	4,617	(*a*)100,281
1973–74	20,974	10,895	(*b*)15,196	17,442	30,494	7,014	6,587	(*b*)108,602
1974–75	24,609	10,684	(*a*)12,606	(*c*)14,083	35,130	6,928	3,736	(*ac*)107,775
				LOCAL VALUE(*d*)				
1970–71	13,224	6,462	10,458	8,177	25,028	5,116	4,132	72,596
1971–72	16,323	8,855	10,764	11,027	30,625	5,929	2,793	86,315
1972–73	16,898	10,646	12,686	13,969	28,000	5,739	4,617	92,555
1973–74	16,568	8,682	14,387	15,433	30,313	7,014	6,587	98,984
1974–75	21,569	8,550	11,732	12,496	34,785	6,928	3,736	99,796

(*a*) Incomplete; excludes oysters in Queensland. (*b*) Incomplete; excludes oysters and rock lobster in Queensland. (*c*) Incomplete; excludes oysters in South Australia. (*d*) Local value is gross value less marketing costs.

Production of selected fisheries

SELECTED FISHERIES PRODUCTS: PRODUCTION AND GROSS VALUE
1974–75

Product		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
QUANTITY									
Fish(*a*)	tonnes	21,826	9,445	(*b*)5,971	9,309	7,222	2,870	781	57,423
Crustaceans(*a*)	„	2,459	387	4,951	4,529	12,274	1,525	2,077	28,201
Molluscs (edible)(*a*)	„	9,492	9,084	(*c*)1,603	(*c*)980	439	3,480	. .	(*d*)25,079
Pearl-shell(*e*)	„	. .	. .	(*f*)	. .	(*f*)	. .	(*f*)	(*g*)246.7
GROSS VALUE ($'000)									
Fish		12,119	4,973	(*b*)4,100	4,860	2,549	768	613	29,983
Crustaceans		5,877	1,125	7,314	8,562	24,558	3,476	3,112	54,023
Molluscs (edible)		6,613	4,586	(*c*)415	(*c*)661	377	2,683	. .	(*d*)15,335
Pearl-shell(*e*)		. .	. .	(*f*)	. .	(*f*)	. .	(*f*)	(*g*)218

(*a*) Estimated live weight. (*b*) Excludes freshwater fish, particulars of which are not available. (*c*) Incomplete; exludes oysters. (*d*) Incomplete; *see* individual States. (*e*) *Source:* Commonwealth Department of Primary Industry. (*f*) Not available for publication. (*g*) Excludes manufacturing shell produced from pearl culture operations.

SELECTED FISHERIES PRODUCTS: PRODUCTION, AND GROSS VALUE
AUSTRALIA

Product		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
QUANTITY						
Fish(*a*)(*b*)	tonnes	51,632	57,002	59,263	65,747	57,423
Crustaceans(*a*)	„	32,273	31,313	(*c*)30,230	(*c*)(*d*)36,827	28,201
Molluscs (edible)(*a*)	„	27,672	29,479	(*e*)33,089	(*e*)29,362	(*f*)25,079
Pearl-shell(*g*)(*h*)	„	365.6	314.5	223.8	204.9	246.7
Trochus-shell(*g*)	„	25.5	0.7	1.1	2.5	21.4
GROSS VALUE ($'000)						
Fish(*b*)		15,348	18,633	23,329	26,334	29,983
Crustaceans		46,385	53,595	(*c*)53,781	(*c*)(*d*)60,101	54,023
Molluscs (edible)		11,466	14,581	(*e*)17,891	(*e*)15,848	(*f*)15,335
Pearl-shell(*g*)(*h*)		275	245	203	236	218
Trochus-shell(*g*)		4	. .	. .	. .	8

(*a*) Estimated live weight. (*b*) Excludes freshwater fish caught in Queensland. (*c*) Excludes freshwater crayfish and crabs in Victoria. (*d*) Excludes rock lobster in Queensland. (*e*) Incomplete; excludes oysters in Queensland, and includes only abalone and scallops in Victoria. (*f*) Incomplete; excludes oysters in Queensland and South Australia. (*g*) *Source* Commonwealth Department of Primary Industry. (*h*) Excludes manufacturing shell produced from pearl culture operations.

Fish

FISH: PRODUCTION, BY TYPE, 1974–75
(tonnes estimated live weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Tuna	(*a*)5,277	89	28	4,842	710	135	..	11,082
Mackerel	54	6	1,139	..	98	3	15	1,315
Snoek	46	1,198	..	1	..	760	..	2,005
Mullet	2,806	380	1,543	252	1,001	5	10	5,999
Bream (including Tarwhine)	317	471	275	23	26	..	1	1,112
Australian salmon	1,382	673	..	873	1,619	631	..	5,178
Ruff	..	14	..	211	794	..	..	1,019
Snapper	1,088	277	118	284	424	..	..	2,190
Morwong	1,344	44	..	1	12	14	..	1,415
Whiting	162	477	389	977	262	1	..	2,268
Flathead	1,816	869	111	15	15	23	..	2,848
Shark	1,123	1,946	39	459	554	651	1	4,773
Leatherjacket	499	2	..	7	20	..	..	528
Other	5,911	3,000	(*b*)2,328	1,364	1,688	647	753	(*b*)15,690
Total	**21,826**	**9,445**	**(*b*)5,971**	**9,309**	**7,222**	**2,870**	**781**	**(*b*)57,423**

(*a*) *Source:* C.S.I.R.O. (*b*) Incomplete; excludes freshwater species in Queensland.

GROSS VALUE OF FISH, BY PRINCIPAL TYPES, 1974–75
($'000)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Tuna	1,583	52	6	1,482	198	27	..	3,349
Mackerel	37	2	836	..	55	1	10	941
Snoek	55	310	..	..	..	86	..	452
Mullet	973	95	583	81	336	1	6	2,076
Bream (including Tarwhine)	357	179	176	20	17	..	1	749
Australian salmon	229	309	..	179	224	124	..	1,065
Ruff	..	5	..	38	111	..	..	154
Snapper	1,925	382	129	201	224	..	..	2,860
Morwong	915	18	..	..	3	4	..	941
Whiting	280	486	388	1,876	159	(*a*)	..	(*a*)3,190
Flathead	1,155	385	75	3	5	7	..	1,630
Shark	339	1,398	7	289	279	327	..	2,640
Leatherjacket	322	1	..	3	7	..	..	333
Other	3,948	1,350	(*b*)1,900	688	932	(*a*)(*c*)191	596	(*a*)(*c*)9,605
Total fish	**12,119**	**4,973**	**(*b*)4,100**	**4,860**	**2,549**	**(*c*)768**	**613**	**(*b*)(*c*)29,983**

(*a*) Value of whiting in Tasmania is not available separately and is included in 'Other'. (*b*) Incomplete; excludes freshwater species in Queensland. (*c*) Includes value of seaweed in Tasmania.

FISH: PRODUCTION, BY TYPE, AUSTRALIA

(tonnes estimated live weight)

Type	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Tuna(*a*)	6,802	10,237	(*b*)13,422	(*b*)(*c*)9,700	11,082
Mackerel	903	900	(*b*)(*d*)1,355	(*b*)(*c*)1,291	1,315
Snoek	2,951	2,245	(*b*)(*d*)918	(*b*)708	2,005
Mullet	5,527	4,705	(*b*)5,316	(*b*)6,071	5,999
Bream (including Tarwhine)	945	815	(*b*)568	(*b*)704	1,112
Australian salmon	3,463	5,246	(*b*)3,482	(*b*)4,513	5,178
Ruff	834	1,220	(*b*)1,449	(*b*)1,161	1,019
Snapper	1,710	1,770	(*b*)1,678	(*b*)1,691	2,190
Morwong	1,029	1,179	(*b*)1,330	(*b*)1,342	1,415
Whiting	1,859	1,852	(*b*)1,730	(*b*)1,762	2,268
Flathead	2,341	2,390	(*b*)1,707	(*b*)1,645	2,848
Shark	7,314	7,310	(*b*)2,897	(*b*)4,233	4,773
Leatherjacket	946	879	(*b*)1,313	(*b*)1,642	528
Other	15,007	16,253	(*b*)(*d*)11,330	(*b*)(*c*)19,748	15,690
Total	**51,632**	**57,002**	**59,263**	**65,747**	**57,423**

(*a*) Includes estimate by C.S.I.R.O. for New South Wales. (*b*) Incomplete; excludes Victoria figure which is not available for publication. (*c*) Tasmanian figures for tuna and mackerel are not available for publication and have been included in 'Other'. (*d*) New South Wales figures for mackerel and snoek are not available separately, and have been included in 'Other'.

Crustaceans

CRUSTACEANS: PRODUCTION, BY TYPE, 1974-75

(tonnes estimated live weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Murray crayfish	23	..	..	..	..	..	..	23
Yabbies	31	2	..	127	..	..	..	161
Rock lobster	139	310	70	1,862	8,306	1,525	..	12,265
Bay lobster	12	..	34	..		..	7	
Prawns	2,075	64	4,414	2,530	3,898	..	2,060	15,041
Crabs	178	11	433	10	70	..	10	712
Total	**2,459**	**387**	**4,951**	**4,529**	**12,274**	**1,525**	**2,077**	**28,201**

CRUSTACEANS: PRODUCTION, BY TYPE, AUSTRALIA

(tonnes live weight)

Type	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Murray crayfish	94	136	(*a*)113	(*a*)295	23
Yabbies					161
Rock lobster	12,950	13,085	13,005	(*b*)11,830	12,265
Bay lobster					
Prawns	18,752	17,519	16,466	24,000	15,041
Crabs	477	573	(*a*)647	(*a*)702	712
Total	**32,273**	**31,313**	**(*c*)30,230**	**(*c*)36,827**	**28,201**

(*a*) Excludes Victorian figure, which is not available for publication. (*b*) Excludes rock lobster in Queensland. (*c*) Incomplete; *see* footnotes to figures for individual species.

Molluscs (edible)

MOLLUSCS: PRODUCTION, BY TYPE, 1974-75

(tonnes estimated live weight)

Type	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Octopus	..	20	..	..	1	..	..	20
Squid	..	52	106	36	12	6	..	212
Oysters	8,787	..	n.a.	n.a.	16	105	..	(*a*)8,908
Mussels	92	5	..	..	3	..	..	100
Pipi	..	..	..	193	..	..	..	193
Scallops	..	6,840	1,497	143	151	1,261	..	9,892
Abalone	613	2,168	..	608	256	2,108	..	5,753
Total	**9,492**	**9,084**	**(*b*)1,603**	**(*b*)981**	**439**	**3,480**	..	**(*a*)25,079**

(*a*) Incomplete; *see* individual States. (*b*) Incomplete; *see* individual species.

MOLLUSCS: PRODUCTION, BY TYPE, AUSTRALIA

(tonnes estimated live weight)

Type	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Octopus	86	65	(*a*)40	(*a*)158	20
Squid	194	209	(*a*)314		212
Cuttlefish	19	2	(*a*)..	(*a*)1	..
Oysters	9,807	10,434	(*b*)9,202	(*b*)10,479	(*b*)(*c*)8,908
Mussels	535	577	(*a*)23	(*a*)63	100
Pipi	47	86	117	203	193
Scallops	9,293	10,148	16,953	12,425	9,892
Abalone	7,692	7,958	6,439	6,032	5,753
Total	**27,672**	**29,479**	**(*d*)33,089**	**(*d*)29,362**	**(*d*)25,079**

(*a*) Excludes Victorian figure, which is not available for publication. (*b*) Excludes Queensland figure which is not available. (*c*) Excludes South Australia figure, which is not available. (*d*) Incomplete; *see* individual species.

Pearls, pearl-shell and trochus-shell

PEARL CULTURE AND PEARL AND TROCHUS SHELL FISHING OPERATIONS AUSTRALIA(*a*)

(*Source: Commonwealth Department of Primary Industry*)

		1970	*1971*	*1972*	*1973*	*1974*
		QUANTITY				
Pearl and Trochus shell fishing operations—						
Production of—						
Pearl shell(*b*)	tonne	365.6	314.5	223.8	204.9	246.7
Trochus shell	tonne	25.5	0.7	1.1	2.5	21.4
Pearl culture operations—						
Live shell introduced	No.	444,727	333,280	432,318	500,651	558,465
	tonne	179.8	107.4	139.6	202.1	249.3
Production—						
Round and baroque pearls	No.	80,445	107,777	133,442	102,033	86,757
	momme(*c*)	48,314	62,179	74,727	57,138	63,722
Half pearls	No.	472,259	413,964	159,113	215,288	224,966
Manufacturing shell	tonne	237.1	164.3	103.0	87.6	66.1

For footnotes *see* next page

PEARL CULTURE AND PEARL AND TROCHUS SHELL FISHING OPERATIONS AUSTRALIA(a)—*continued*

VALUE ($'000)

	1970	*1971*	*1972*	*1973*	*1974*
Pearl and Trochus shell fishing operations–					
Production of—					
Pearl shell	275	245	203	236	218
Trochus shell	4	..	..	..	8
Pearl culture operations—					
Production of—					
Round and baroque pearls	2,029	3,165	3,861	4,781	6,140
Half pearls	606	366	251	423	457
Manufacturing shell	116	89	59	44	24

(*a*) Figures refer to the year ended January for the Northern Territory and Queensland and to the year ended December for Western Australia. (*b*) Excludes manufacturing shell produced from pearl culture operations. (*c*) A momme is a pearl weight measurement equivalent to 3.769 grams.

Whales

WHALES TAKEN(a): AUSTRALIA

(*Source:* Commonwealth Department of Primary Industry)

(Number)

	1971	*1972*	*1973*	*1974*	*1975*
Male	820	792	684	629	692
Female	40	161	287	450	480
Total	**860**	**953**	**971**	**1,079**	**1,172**

(*a*) Sperm whales only were taken.

Processing of fish, crustaceans and molluscs

Ice is extensively used for the chilling of fish taken in estuarine and inshore fisheries. Refrigeration is used particularly on vessels operating in the tuna fishery and prawn fisheries to chill or freeze the catch. Refrigerated brine tanks are most commonly used.

Processing plants are located strategically throughout Australia close to fishing grounds. In recent years a number of shore-based plants have been established in remote areas of northern Australia to service the expansion of the prawn fishery.

Rock lobsters, prawns and scallops are frozen for export; tuna, snoek, Australian salmon and abalone are canned; small amounts of fish are smoked; some molluscs are bottled. Hand labour is still used extensively in processing operations, but mechanisation is being progressively introduced.

Fish, crustaceans and molluscs intended for export are processed in establishments registered under the Export (Fish) Regulations. Edible fish for local consumption is mainly dispatched fresh iced to markets. A survey of the Australian seafood processing industry was published by the Department of Trade and Industry in 1971.

FISH PROCESSING: AUSTRALIA

(tonnes)

	1970–71	1971–72	1972–73	1973–74	1974–75
Fish preserving—					
Fish used—					
Shellfish	1,742	1,931	1,663	1,311	1,123
Other—					
Whole	8,707	10,893	13,107	11,382	21,446
Headed and/or gutted	1,392	1,473	1,440	602	1,204
Production—					
Smoked fish and fish paste	694	557	640	659	318
Canned or bottled shellfish	1,679	1,758	1,573	1,241	1,056
Australian salmon (canned)	1,923	2,226	2,021	1,843	3,242
Other canned fish (incl. fish loaf, cake, etc.)	3,227	4,073	5,242	4,172	9,021
Other fish processing—					
Fish meal production	2,014	2,223	1,690	2,244	2,138

Whale processing

Oil from sperm whales is used in the manufacture of soap, plastics and watch lubricants, and in automatic transmission systems in motor cars.

WHALE PROCESSING: AUSTRALIA

(*Source:* Commonwealth Department of Primary Industry)

		1971	1972	1973	1974	1975
Quantity of sperm whale oil produced	barrels(*a*)	36,414	34,632	32,952	34,956	34,610
Value of whale oil produced	$'000	1,390	993	951	1,261	1,218
Value of by-products (meal, meat, solubles, etc.)	„	553	585	624	795	631
Total value of products	„	**1,943**	**1,578**	**1,575**	**2,056**	**1,849**

(*a*) 6 barrels = approximately 1.016 tonnes.

Domestic marketing of fisheries products

Although virtually the whole of the tuna and Australian salmon catches and a large proportion of the snoek catch are canned, the greater part of Australian fish production is marketed fresh or frozen.

Marketing arrangements for fresh fish vary. In New South Wales fish marketing is the responsibility of the Fish Marketing Authority, which operates the Metropolitan and Wollongong Fish Markets. In other coastal centres of New South Wales fishermen's co-operatives may become registered as local fish markets. In Queensland the Fish Board sells all production on behalf of fishermen in that State, except fish intended for export and interstate trade. In Victoria, South Australia, Western Australia and Tasmania there is no restriction on market outlets. In Victoria, South Australia and Western Australia most fish is sent to metropolitan wholesale fish markets for auctioning. Small quantities are processed for sale locally, chiefly by co-operatives. Nearly all fresh fish in Tasmania is consigned direct to processors. The principal outlets for fish products in Australia are retail and catering establishments.

Consumption of edible fisheries products

Particulars of the estimated supplies of fish, crustaceans and molluscs available for consumption per head of population, in terms of edible weight, are included in the following table. For the purpose of compiling this table, an allowance has been made for the non-commercial fish catch.

FISHERIES PRODUCTS: ESTIMATED SUPPLIES AVAILABLE FOR CONSUMPTION AUSTRALIA

(kg edible weight per person per annum)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Fresh or frozen—					
Fish—					
Australian origin(*a*)	1.6	1.7	1.7	2.0	1.3
Imported	2.1	1.5	1.5	1.8	1.6
Crustaceans and molluscs	0.9	0.9	0.8	1.2	0.6
Cured (including smoked and salted)	0.5	0.5	0.8	0.9	0.7
Canned—					
Australian origin(*a*)	0.5	0.5	0.3	0.6	0.7
Imported	0.9	0.9	0.9	1.2	1.1
Total	**6.5**	**6.0**	**6.1**	**7.8**	**6.1**

(*a*) Estimates have been calculated by subtracting export figures from production figures. In the case of fresh or frozen fish, an allowance of 10 per cent has been added to the commercial production figure to allow for non-commercial catch.

Overseas trade in fisheries products

Edible fisheries products

OVERSEAS TRADE IN EDIBLE FISHERIES PRODUCTS: AUSTRALIA

	Quantity (tonnes)			*Value ($'000 f.o.b.)*		
	1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
IMPORTS						
Fresh, chilled, frozen or boiled(*a*)	19,197	23,135	20,346	15,739	19,009	17,336
Smoked, dried, salted or in brine	2,946	4,694	3,739	2,835	4,747	4,281
Potted or concentrated	95	154	150	225	329	395
Canned—						
Herrings	1,994	2,047	1,734	1,377	1,668	1,873
Salmon	4,590	6,901	3,657	7,841	16,884	9,724
Sardines, sild, brisling, etc.	3,090	3,023	3,175	3,588	3,911	5,024
Tuna	38	538	2,355	43	723	3,418
Other fish	2,372	3,448	3,874	1,884	2,868	3,649
Crustaceans and molluscs	1,071	1,715	1,561	2,200	3,607	2,881
Total canned	*13,155*	*17,672*	*16,356*	*16,933*	*29,661*	*26,569*
Other prepared or preserved fish, crustaceans and molluscs(*b*)	11,030	10,448	8,936	11,432	14,201	13,156
Grand total	..	..	..	**47,164**	**67,947**	**61,737**
EXPORTS (Australian produce only; excludes re-exports)						
Fresh, chilled or frozen(*c*)—						
Fish	2,619	2,805	1,392	1,283	1,628	1,106
Crustaceans and molluscs—						
Rock lobster tails	4,544	3,749	4,193	29,783	25,706	32,026
Prawns	6,457	6,719	7,579	23,721	23,904	24,443
Other(*d*)	3,017	3,026	1,473	8,620	8,085	4,120
Crustaceans and molluscs boiled in water	644	334	357	2,234	1,194	1,124
Prepared and preserved—						
Fish	1,599	215	158	1,154	380	264
Crustaceans and molluscs	2,262	1,787	1,570	5,651	5,170	5,106
Grand total	..	..	..	**72,447**	**66,067**	**68,189**

(*a*) Excludes frozen smoked, which is included in item Smoked, dried, etc. (*b*) 1974–75 figures for this category are not comparable with those for previous years as the item 'prawn crackers' is no longer available separately and has been excluded. (*c*) Excludes frozen smoked, which is included in item 'Prepared and preserved crustaceans and molluscs'. (*d*) Total values for this item for 1972–73, 1973–74 and 1974–75 include values of $224,000, $232,000 and $215,000 respectively, for which no quantities have been included.

Non-edible fisheries products

OVERSEAS TRADE IN SELECTED NON-EDIBLE FISHERIES PRODUCTS: AUSTRALIA

		Quantity			*Value ($'000 f.o.b.)*		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
IMPORTS							
Fish heads, fresh or frozen	tonnes	1,972	883	576	262	128	95
Other fish waste . .	„	1,109	1,978	3,484	190	185	128
Fish, live(*a*) . . .	'000	6,201	8,315	10,856	494	688	1,029
Fish meal . . .	tonnes	14,110	13,873	23,516	2,054	4,769	7,064
Whale oil . . .	'000 litres	146	144	81	46	44	40
Cod-liver oil . . .	„	342	324	200	115	123	112
Other oils (including seal oil)	„	748	1,043	985	145	218	382
Coral and shells and their waste . . .	tonnes	91	75	77	33	56	82
Tortoise shell (including turtle shell, claws, waste)	„	..	2	..	..	57	5
Pearls		..	..	..	142	232	204
Total . . .		..	..	..	**3,481**	**6,500**	**9,141**
EXPORTS (Australian produce only; excludes re-exports)							
Australian produce—							
Whale oil . . .	'000 litres	7,685	8,494	4,184	996	1,088	713
Other oils . . .	„	2	7	97	1	8	30
Pearl-shell . . .	tonnes	560	455	400	547	489	471
Other shell (including trochus) . . .	„	302	297	417	86	115	166
Natural pearls . .		..	..	..	86	3	6
Cultured pearls—							
Round . . .	No.	89,065	49,772	58,302	1,038	656	1,104
Half round . .	„	159,195	279,474	209,824	299	521	324
Other . . .		..	..	..	48	20	40
Total . . .		..	..	..	**3,101**	**2,900**	**2,854**

(*a*) Live fish whether or not fit for human consumption.

CHAPTER 26

MINERAL INDUSTRY

Further detailed statistics and information on the subjects dealt with in this chapter are contained in the annual printed bulletin *The Australian Mineral Industry—Annual Review* and other publications issued by the Bureau of Mineral Resources, Geology and Geophysics, which also issues, in conjunction with the A.B.S., a quarterly publication, *The Australian Mineral Industry*, (*Quarterly Review and Statistics*) (10.17). The annual statistical bulletins *Mining Establishments, Summary of Operations* (*Preliminary*) (10.72), *Mining Establishments, Details of Operations* (10.60), *Mineral Production* (10.51), *Mineral Exploration* (10.41), and *Mining Industry, Foreign Ownership and Control* (10.42) of the A.B.S. contain economic statistics of the industry prepared and published as soon as possible after the data have been compiled. A monthly statistical bulletin *Minerals and Mineral Products* (10.19) is issued also, and other current statistics on mining or mine products are contained in the *Monthly Review of Business Statistics* (1.4), the *Digest of Current Economic Statistics* (1.5), and the monthly bulletin *Production Statistics* (12.14).

GENERAL

Geology

General geology

Most of the western and central part of the Australian continent consists of basement rocks of Precambrian age. Younger Palaeozoic rocks, mostly of geosynclinal origin, form a discontinuous belt several hundred miles wide extending from north Queensland to Tasmania. Mesozoic platform sediments form a broad zone separating the Palaeozoic and Precambrian rocks and extending from the Gulf of Carpentaria to central New South Wales. Cainozoic rocks occur mainly in Victoria, south-western New South Wales and southern South Australia, and as residual basalt cappings over extensive areas of the Palaeozoic rocks of eastern Australia.

Economic geology

Minerals of economic significance occur widely throughout the Precambrian and Palaeozoic rocks of the continent. Palaeozoic mineralisation is perhaps more varied, but the Palaeozoic deposits now being worked are in general smaller than those found in Precambrian rocks. Most of Australia's metallic mineral deposits occur within two broad regions, a region of Precambrian rocks in the west and central areas of the continent and a region of younger Palaeozoic rocks in the east.

The major deposits of metallic ore minerals, including those of iron, lead, zinc, silver, copper, uranium, nickel, and gold, are contained in the Precambrian rocks of the Australian shield. Smaller deposits of ores of tin, tungsten, tantalum, beryllium, manganese, cobalt, and mica are also contained in these rocks.

The mineralised Palaeozoic rocks contain major deposits of gold, now mostly worked out, and a few large copper and lead-zinc-silver ore occurrences. Smaller amounts of ores of tin, tungsten, molybdenum, bismuth, antimony, and ores of other metals also occur in these rocks.

Outside these two main categories, however, there are some metallic mineral deposits of considerable economic importance which were formed during the Tertiary Period. These include bauxite (the ore of aluminium) which occurs as a surface capping over rocks of various ages, the result of a long period of weathering and reworking. Extensive deposits of bauxite occur at Weipa on Cape York Peninsula in north Queensland, at Gove on the north-eastern tip of the Northern Territory, in the Darling Range in Western Australia and near Kalumburu in the north-west of Western Australia.

Other important deposits which are the results of weathering are the lateritic nickel deposits at Greenvale and Rockhampton in Queensland, and in the Kalgoorlie and Wingellina areas of Western Australia. Mineral sands, another important exception, contain rutile and ilmenite (ores of titanium), zircon (zirconium ore), monazite (thorium ore), and other minerals, and are particularly well developed on the coasts of central and northern New South Wales, southern Queensland and south-western Western Australia. The immediate source of the deposits of the eastern States is considered to be Mesozoic sedimentary rocks. The Western Australian deposits are thought to be derivatives of the Precambrian granites of the Australian shield.

Occurrences of fuel minerals (coal, oil and natural gas) are characteristically located in sedimentary basins. Large areas of Australia are covered by these basins, and more than twenty major sedimentary basins have been identified on the Australian mainland. In addition, sedimentary basins are known to exist in off-shore areas adjacent to the Australian coast. The individual basins range in area from 10,000 to 1,760,000 square kilometres and contain marine and continental sedimentary rocks ranging in maximum thickness from 300 to about 10,000 metres and including rocks of all ages from Proterozoic to Tertiary.

The main Australian deposits of black coal are in eastern Queensland and New South Wales. Most are Permian in age, although the deposits at Ipswich in Queensland are Triassic, and they predominantly have a bituminous rank; both coking and non-coking types occur. The extensive brown coal deposits of Victoria were formed during the Tertiary Period and are used to produce electricity for that State. The Late Triassic sub-bituminous coal at Leigh Creek is used to produce electricity in South Australia and Permian sub-bituminous coal is mined at Collie in Western Australia.

Crude oil and natural gas have been found in a number of sedimentary basins. In the Bowen–Surat Basin, Queensland, small commercial deposits of oil exist at the Moonie, Alton and Bennett fields, and commercial deposits of natural gas exist in the Roma and Rolleston areas. Gas from the Roma area is used to supply Brisbane. Small gas reserves are present at Gilmore in the Adavale Basin. Most of the oil reservoir rocks are of Lower Jurassic age, and the gas reservoir rocks are of Mesozoic and Permian age. In the Gippsland Basin, offshore from Victoria in Bass Strait, oil in commercial quantities has been discovered in the Kingfish, Halibut, Tuna, Barracouta and Mackerel fields and commercial natural gas in the Marlin, Barracouta, Snapper and Tuna fields. Cretaceous and Tertiary strata are the reservoir rocks. Eastern Victoria and Melbourne are now supplied with gas from Marlin and Barracouta fields; oil is being produced from Kingfish, Halibut and Barracouta. Commercial deposits of natural gas were discovered in the Cooper Basin, South Australia at Gidgealpa, Moomba, Daralingie, Toolachee, Merrimelia, Della, Strzelecki, Mudrangie, Packsaddle, Brolga, Coonatie, Fly Lake, Big Lake, Dullingari, Brumby, Kanowana and Burke, and gas and oil at Tirrawarra, Moorari and Fly Lake, all in South Australia, and gas accumulations at Wolgolla, Durham Downs, Roseneath and Epsilon, Queensland, The reservoir rocks are of Permian age. In the Carnarvon Basin, Western Australia, commercial crude oil, mainly in the Cretaceous formations, and also to a lesser degree in the Jurassic rocks, is being produced from Barrow Island. Offshore, major gas deposits have been discovered at Goodwyn, Tidepole, West Tryal Rocks, Angel and North Rankin; minor gas accumulations occur at Dockrell and Rankin. Non-commercial oil was discovered at Rankin, Legendre, Madeleine, Eaglehawk, Egret, Lambert, Dockrell, Goodwyn and Tidepole. Further south, onshore in the Perth Basin, natural gas in commercially significant quantities was discovered in the Yardarino, Gingin, Dongara, Mondarra and Walyering areas, the reservoir rocks being of Lower Jurassic, Lower Triassic and Permian ages. The evaluation of the size of the Scott Reef gas discovery in the Brause Basin in reservoirs of Lower to Middle Jurassic, and Upper Triassic age is dependent upon the drilling of at least one other well. Natural gas was encountered in the offshore Bonaparte Gulf Basin in the Petrel, Tern, Sunrise, Troubadour and Puffin prospects and onshore at Bonaparte and Keep River. Natural gas was discovered in large quantities in formations of Ordovician age at Mereenie and Palm Valley in the Amadeus Basin, Northern Territory. The lower gas accummulation at Mereenie is underlain by oil in the same Pacoota Sandstone reservoir.

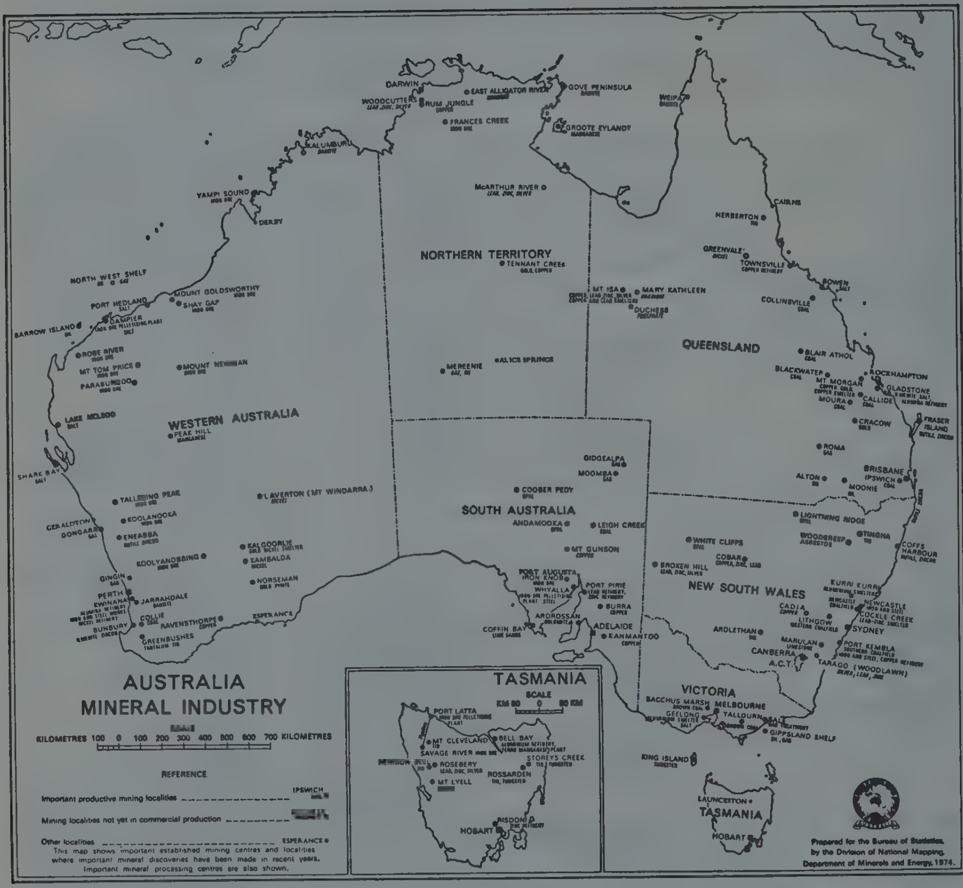
The most important non-metallic minerals mined in Australia are asbestos, clays, sand and gravel, limestone, gypsum, salt and silica.

Opal is found in the flat-lying sedimentary beds of the Great Artesian Basin in Queensland, New South Wales and South Australia and was formed during the Tertiary Period. The other important gemstone produced is sapphire from alluvial wash near Inverell and Glen Innes in New South Wales and Anakie in Queensland.

A table showing most of the larger mineral deposits now being mined in Australia according to the age of the geological formation in which they are found is shown on page 927.

PRINCIPAL AUSTRALIAN MINERAL DEPOSITS

Age of geological formation in which located	*Metal or mineral*	*State or Territory*	*Locality*
Precambrian (more than 570 million years old)	Copper	Queensland	Mount Isa, Gunpowder
		Western Australia	Golden Grove
		Northern Territory	Tennant Creek
	Gold	Western Australia	Kalgoorlie, Telfer and other localities
	Iron	South Australia	Middleback Ranges
		Western Australia	Yampi Sound, Pilbara and Yilgarn regions
	Lead-silver-zinc	New South Wales	Broken Hill
		Northern Territory	McArthur River
		Queensland	Mount Isa
	Nickel	Western Australia	Kambalda, Windarra, Scotia, Nepean, Agnew, Forrestania, Spargoville
	Tin (lode)	Western Australia	Greenbushes
	Uranium	Northern Territory	Nabarlek, Ranger, Koongarra, Jabiluka
Palaeozoic (between 235 and 570 million years old)	Black coal	New South Wales	Hunter Valley, Lithgow, South Coast
		Queensland	Bowen Basin, Blair Athol
		Western Australia	Collie
	Copper	New South Wales	Cobar, Woodlawn
	Copper-gold	Tasmania	Mount Lyell
	Iron	Tasmania	Savage River
	Lead-silver-zinc	New South Wales	Elura
		Tasmania	Rosebery, Que River
	Phosphate	Queensland	Duchess, Lady Annie, Ardmore, Yelvertoft
	Tin (lode)	Queensland	Herberton
		New South Wales	Ardlethan
		Tasmania	Renison, Luina and north-east of State
	Tungsten	Tasmania	King Island and north-east of State
Mesozoic between 65 and 235 million years old)	Black coal	Queensland	Ipswich, Callide
		South Australia	Leigh Creek
	Manganese	Northern Territory	Groote Eylandt
Cainozoic (less than 65 million years old)	Bauxite	Queensland	Weipa, Aurukun
		Northern Territory	Gove
		Western Australia	Darling Range
	Brown coal	Victoria	Gippsland
	Mineral sands	New South Wales	North coast
		Queensland	South coast
		Western Australia	South-west coast
	Nickeliferous laterite	Queensland	Greenvale
	Tin (alluvial)	New South Wales	Tingha
		Queensland	Herberton
		Tasmania	North-east of State
	Uranium	Western Australia	Yeelirrie


AUSTRALIA
MINERAL INDUSTRY
[redacted]
KILOMETRES 100 0 100 200 300 400 500 600 700 KILOMETRES
REFERENCE
Important productive mining localities
IPSWICH
Mining localities not yet in commercial production
Other localities
ESPERANCE
WESTERN AUSTRALIA
NORTHERN TERRITORY
QUEENSLAND
SOUTH AUSTRALIA
NEW SOUTH WALES
VICTORIA
TASMANIA
A.C.T.
DARWIN
WOODCUTTERS
LEAD, ZINC, SILVER
RUM JUNGLE
COPPER
EAST ALLIGATOR RIVER
FRANCES CREEK
IRON ORE
GOVE PENINSULA
BAUXITE
GROOTE EYLANDT
MANGANESE
WEIPA
BAUXITE
McARTHUR RIVER
LEAD, ZINC, SILVER
KALUMBURU
BAUXITE
YAMPI SOUND
IRON ORE
DERBY
NORTH WEST SHELF
GAS
PORT HEDLAND
SALT
MOUNT GOLDSWORTHY
IRON ORE
SHAY GAP
IRON ORE
DAMPIER
IRON ORE PELLETISING PLANT
SALT
BARROW ISLAND
OIL
ROBE RIVER
IRON ORE
MT TOM PRICE
IRON ORE
MOUNT NEW[redacted]AN
IRON ORE
PARABU[redacted]OO
IRON ORE
LAKE MCLEOD
SALT
PEAK HILL
MANGANESE
SHARK BAY
SALT
TALL[redacted]ING PEAK
IRON ORE
KOOLANOOKA
IRON ORE
GERALDTON
DONGARA
GAS
ENEABBA
RUTILE, ZIRCON
LAVERTON (MT WINDARRA)
NICKEL
KALGOORLIE
GOLD, NICKEL SMELTER
KAMBALDA
NICKEL
KOOLYANOBBING
IRON ORE
NORSEMAN
GOLD, PYRITE
GINGIN
GAS
PERTH
KWINANA
ALUMINA REFINERY
IRON AND STEEL WORKS
NICKEL REFINERY
JARRAHDALE
BAUXITE
COLLIE
COAL
BUNBURY
ILMENITE, ZIRCON
RAVENSTHORPE
COPPER
ESPERANCE
GREENBUSHES
TANTALUM, TIN
TENNANT CREEK
GOLD, COPPER
MT ISA
COPPER, LEAD, ZINC, SILVER
COPPER AND LEAD SMELTERS
MARY KATHLEEN
URANIUM
DUCHESS
PHOSPHATE
MEREENIE
GAS, OIL
ALICE SPRINGS
CAIRNS
HERBERTON
TIN
GREENVALE
NICKEL
TOWNSVILLE
COPPER REFINERY
BOWEN
SALT
COLLINSVILLE
COAL
BLAIR ATHOL
COAL
BLACKWATER
COAL
MT MORGAN
COPPER, GOLD
COPPER SMELTER
ROCKHAMPTON
GLADSTONE
ALUMINA REFINERY
MOURA
COAL
CALLIDE
COAL
CRACOW
GOLD
FRASER ISLAND
RUTILE, ZIRCON
ROMA
GAS
BRISBANE
IPSWICH
COAL
ALTON
OIL
MOONIE
OIL
GIDGEALPA
GAS
MOOMBA
GAS
COOBER PEDY
OPAL
ANDAMOOKA
OPAL
LEIGH CREEK
COAL
MT GUNSON
COPPER
PORT AUGUSTA
IRON KNOB
IRON ORE
WHYALLA
IRON ORE PELLETISING PLANT, STEEL
PORT PIRIE
LEAD REFINERY, ZINC REFINERY
BURRA
COPPER
ARDROSSAN
DOLOMITE
COFFIN BAY
LIME SANDS
ADELAIDE
KANMANTOO
COPPER
LIGHTNING RIDGE
OPAL
WHITE CLIFFS
OPAL
TINGHA
TIN
WOODSREEF
ASBESTOS
COBAR
COPPER, ZINC, LEAD
BROKEN HILL
LEAD, ZINC, SILVER
COFFS HARBOUR
RUTILE, ZIRCON
KURRI KURRI
ALUMINIUM SMELTER
NEWCASTLE COALFIELD
NEWCASTLE
IRON AND STEEL
COCKLE CREEK
LEAD-ZINC SMELTER
CADIA
COPPER
LITHGOW
WESTERN COALFIELD
SYDNEY
ARDLETHAN
TIN
MARULAN
LIMESTONE
PORT KEMBLA
SOUTHERN COALFIELD
IRON AND STEEL, COPPER REFINERY
CANBERRA
TARAGO (WOODLAWN)
SILVER, LEAD, ZINC
BACCHUS MARSH
BROWN COAL
MELBOURNE
GEELONG
ALUMINIUM SMELTER
SALT
YALLOURN
BROWN COAL
SALE
GAS TREATMENT
GIPPSLAND SHELF
OIL, GAS
KING ISLAND
TUNGSTEN
LAUNCESTON
HOBART
TASMANIA
SCALE
KM 50 0 50 KM
PORT LATTA
IRON ORE PELLETISING PLANT
MT CLEVELAND
TIN
BELL BAY
ALUMINIUM REFINERY,
FERRO MANGANESE PLANT
SAVAGE RIVER IRON ORE
[redacted]
TIN
ROSEBERY
LEAD, ZINC, SILVER
STOREYS CREEK
TIN, TUNGSTEN
ROSSARDEN
TIN, TUNGSTEN
MT LYELL
[redacted]
RISDON
ZINC REFINERY
HOBART

This map shows important established mining centres and localities where important mineral discoveries have been made in recent years. Important mineral processing centres are also shown.

Prepared for the Bureau of Statistics, by the Division of National Mapping, Department of Minerals and Energy, 1974.

PLATE 57

Mineral resources

Australia is self-sufficient in most minerals of economic importance and much more than self-sufficient in some. The following table summarises, in a general way, known reserves and production of the principal metals and minerals in relation to Australian consumption of these commodities and present export availability. Many qualifications are necessary to a simple summary of this kind, and the table should be read in conjunction with the following detailed notes on principal minerals.

RESERVES OF MINERALS: AUSTRALIA

(*Source:* Bureau of Mineral Resources, Geology and Geophysics)

Production	*Reserves adequate*	*Reserves uncertain*	*Reserves negligible*
Production sufficient for domestic demand and exports	Aluminium (bauxite) Barite Bismuth Cadmium Coal (black) Cobalt Copper Gold Gypsum Iron ore Lead Manganese ore (metallurgical) Natural gas Nickel Opal Phosphate Salt Silver Thorium (monazite) Tin Titanium (ilmenite and rutile) Tungsten Zinc Zirconium (zircon)	Antimony Beryllium Glass sands Talc Tantalum	
Production sufficient for domestic demand	Clays (except light grade china clay) Coal (brown) Dolomite		
Production not sufficient for domestic demand	Asbestos (chrysotile) Felspar Lithium Sulphides (as source of sulphur) Limestone	Abrasives Arsenic Bentonite China clay Chromium Crude oil Diatomite Fluorite Magnesite Mercury Mineral pigments Molybdenum Platinum Potassium salts Sillimanite	
Production nil	Vanadium	Diamonds Graphite Manganese ore (chemical) Vermiculite	Asbestos (crocidolite) Borates Nitrates Sulphur

Individual minerals

NOTE. For further information on recent developments see pages 969–72.

Bauxite. As a result of discoveries in the Weipa and Aurukun areas, Queensland, Gove, Northern Territory, and in the Darling Range and Kimberley area in Western Australia, Australia's reserves of bauxite are known to be vary large, perhaps the largest in the world. Total reserves in the Weipa and Aurukun areas are believed to be in excess of 3,000 million tonnes, while proved reserves at Gove are reported to be 250 million tonnes of bauxite. In the Darling Range, reserves of economic grade bauxite are estimated to be about 1,000 million tonnes spread over several locations. Another significant deposit of 235 million tonnes has been proved in the Mitchell Plateau area in the Kimberley District of Western Australia.

Coal. Australia has coal resources of all types adequate to provide for future domestic requirements and a substantial export surplus. Australia's coal reserves are concentrated mainly in the mainland eastern States. The bituminous coal is located mainly in New South Wales and Queensland; Victoria has very substantial brown coal reserves in the Latrobe Valley. The value of coal production in 1975 was the greatest of all mine products, and the value of coal exports was second only to iron ore and pellets. Resources of black coal in Eastern Australia were estimated in 1975 to be not less than 200,000 million tonnes of which *in situ* reserves were 34,739 million tonnes.

Copper. The principal deposit of this metal is at Mount Isa, Queensland where ore reserves were estimated at 140 million tonnes in 1975 containing 4.197 million tonnes contained copper. Other important deposits are situated at Cobar, New South Wales; Gunpowder, Queensland; Mount Lyell, Tasmania; Kanmantoo and Mount Gunson, South Australia; and at Tennant Creek, Northern Territory. Copper concentrates are produced as by-products of nickel concentrate production at Kambalda, Western Australia; silver-lead-zinc concentrate production at Broken Hill, New South Wales; tin concentrate production at Luina, Tasmania and lead concentrate production at Rosebery, Tasmania.

Crude Oil. The aggregate recoverable reserves of crude oil in Australia in commercially viable fields at the end of 1975 were estimated to be 243 million cubic metres. The largest reserves (213.5 million cubic metres) are in the offshore Gippsland Basin fields (Barracouta, Marlin, Halibut, Kingfish, Tuna, Mackerel), Victoria, followed by those in the Barrow Island field in the Carnarvon Basin, Western Australia (21.34 million cubic metres), the Tirrawarra, Moorari and Fly Lake fields in the Cooper Basin, South Australia (7.65 million cubic metres), the Moonie, Alton and Bennett fields in the Surat Basin, Queensland (240,000 cubic metres) and in the Dongara and Yardarino fields in the Perth Basin, Western Australia (230,000 cubic metres). To the end of 1975 the cumulative production of crude oil from fields declared commercially viable in Australia accounted for 122.15 million cubic metres representing a 33.5 per cent depletion of the initial estimates of reserves in all commercially viable crude oil fields in Australia.

The Queensland oil reserves, mainly those in the Moonie field, are depleted by nearly 93 per cent, those in the Carnarvon Basin fields by 47 per cent and the offshore Gippsland Basin reserves by 32 per cent.

Gold. Australia's gold resources are heavily concentrated in Western Australia, mainly in the Kalgoorlie-Coolgardie area, but small deposits of gold-bearing ore occur in all States. In addition, gold is commonly obtained as a by-product of other mining activities, particularly copper mining. Economic gold ore reserves at Kalgoorlie were estimated at 3.7 million tonnes in early 1976.

Iron ore. Very extensive deposits of iron ore have been discovered, establishing Australia as one of the most important iron ore provinces in the world. The largest deposits are located in the Hamersley and Ophthalmia Ranges in the Pilbara region of north-west Western Australia, and are being worked at Mount Tom Price, Paraburdoo, Mount Whaleback, and Robe River. Other commercially important deposits of iron ore are situated in the Savage River area of Tasmania, in the Middleback Ranges of South Australia, and in the Mount Goldsworthy, Shay Gap, Yampi Sound, and Koolyanobbing areas in Western Australia. These deposits are adequate to supply the estimated needs of the Australian iron and steel industry far into the future, as well as providing a large export availability. Reserves and paramarginal resources in Australia are estimated to be 35,000 million tonnes. An assessment of iron ore resources is given in *The Australian Mineral Industry Quarterly Review* Vol. 27, No. 2.

Lead-zinc-silver. Australia has been a major producer of lead, zinc and silver since the discovery of ore at Broken Hill, New South Wales in 1883. Australian reserves of contained lead are 13.9 million tonnes, contained zinc 19.3 million tonnes, and contained silver 24.2 million kilograms. Lead and zinc concentrates are being produced with copper concentrates at Cobar, New South Wales. Reserves of lead-zinc-silver ore at Broken Hill currently exceed 17 million tonnes assaying about 11 percent lead, 11 per cent zinc and 100 grams of silver per tonne. Reserves at another major producing mine, Mount Isa in Queensland, are 51 million tonnes assaying 7 per cent lead 6.6 per cent zinc and

153 grams silver per tonne. Development of a new mine is underway at Hilton, near Mount Isa with reserves of 37 million tonnes of ore, assaying 7.7 per cent lead, 9.6 per cent zinc and 180 grams silver per tonne. Reserves at the Lady Loretta deposit, near Mount Isa, are 8.7 million tonnes of ore assaying 6.7 per cent lead, 18.1 per cent zinc and 109 grams silver per tonne. The capacity of the mine at Rosebery in Tasmania (reserves of 8.4 million tonnes, 5 per cent lead, 17.3 per cent zinc and 148 grams silver per tonne) has been increased. Development of the McArthur River deposit in Northern Territory (reserves of 190 million tonnes, 4.1 per cent lead, 9.5 per cent zinc and 44 grams silver per tonne) is dependent on the solution of complex metallurgical problems. A deposit discovered near Tarago, near Goulburn, N.S.W. at Woodlawn could commence production in 1978; reserves are estimated at 9 million tonnes assaying 3.0 per cent lead, 7.5 per cent zinc and 1.5 per cent copper.

Manganese. Known reserves of manganese, exceed domestic requirements and Australia is a major exporter. The principal deposit is currently being worked at Groote Eylandt in the Gulf of Carpentaria.

Mineral Sands. Ores of titanium (rutile and ilmenite), zirconium (zircon) and thorium and rare earths (monazite) occur in mineral sands over extensive areas of the north and central coasts of New South Wales, the south and central coasts of Queensland, and the south-western coast of Western Australia and at Eneabba, 270 kilometres north of Perth. Resources are large by world standards and easily workable. Australia's reserves of rutile and zircon represent a large proportion of the world's reserves of these minerals. In 1974 Australia was responsible for about 95 per cent of the world's supplies of rutile, 70 per cent of zircon, 33 per cent of monazite and 22 per cent of ilmenite.

Natural gas. The initial recoverable reserves of natural gas in commercially viable fields, both in the offshore and onshore accumulations were estimated at the end of 1975 at 349.18 thousand million (billion) cubic metres. Of this amount 23.1 billion cubic metres, or 7 per cent, have been produced; the remaining reserves at 31 December 1975 were, therefore 326.08 billion cubic metres. The largest remaining gas reserves (211.14 billion cubic metres) are in the offshore Gippsland Basin, Victoria. Production commenced from here in 1969, and gas is supplied to Melbourne, Geelong and Ballarat—Bendigo areas and a Melbourne-Benalla-Wodonga-Albury pipeline is planned. The 93.86 billion cubic metres of gas reserves in the Cooper Basin, South Australia, had been committed for the supply of the Adelaide, South Australia and the New South Wales markets. The supply of the Adelaide market commenced in November 1969. The 1,370 kilometre pipeline to Sydney was opened in 1976. The small gas reserves in the Roma area in Queensland and Dongara-Mondarra-Gingin area in Western Australia have been supplying the Brisbane and Perth-Pinjarra areas since 1969 and 1971 respectively.

Natural gas liquids. The Australian reserves of natural gas liquids in commercial viable fields, i.e. condensate and LPG (liquified petroleum gas), remaining at the end of 1975 were estimated at 134.51 million cubic metres. On the whole these reserves are distributed proportionately to the reserves of natural gas, the largest being in the offshore Gippsland Basin and the Cooper Basin. A separate 'liquids' pipeline for the transmission of NGL and crude oil from the Cooper Basin fields to Red Cliffs near Port Pirie, South Australia, has been under consideration for some time.

Nickel. In the Kalgoorlie-Widgiemooltha area of Western Australia more than 30 nickel sulphide ore bodies have been found since the original discovery of nickel ores was made at Kambalda in 1966. Total ore reserves in the Kalgoorlie area are more than 34 million tonnes, averaging 2.8 per cent nickel. Other large but low-grade ore bodies have been found between Leonora and Wiluna; the largest of these is Mount Keith where ore reserves are estimated to be 290 million tonnes averaging 0.6 per cent nickel. In the Leonora-Wiluna area at Agnew the ore body is estimated to contain at least 45 million tonnes of ore averaging over 2.0 per cent nickel.

A nickel refinery has been built at Kwinana, Western Australia, with an annual capacity of 30,000 tonnes. The smelter at Kalgoorlie now has a capacity to treat 350,000 tonnes of nickel concentrate per annum. The matte produced is processed at the Kwinana and overseas refineries. Bulk oxygen in the smelter is expected to increase throughput by 75 per cent.

Production from lateritic nickel deposits at Greenvale in Queensland commenced in 1974. The ore is refined near Townsville at Yabulu. Other large, but at present uneconomic, deposits of this type are known at Wingellina, near the border of South Australia and Western Australia, at the Ora Banda district northwest of Kalgoorlie and at Marlborough in Queensland.

Phosphate. Major deposits of phosphate rock are known in northwest Queensland and in the Northern Territory with reserves exceeding 3,300 million tonnes of average grade 7.3 per cent phosphorus. Production from the northwest Queensland deposits commenced in 1975.

Tin. The main deposits of tin now being exploited are in the Herberton field inland from Cairns, Queensland; north-west and north-east Tasmania; in the south-west of Western Australia; and at Ardlethan and in the New England area, in New South Wales.

Tungsten. The main deposits of tungsten ores are in north-eastern Tasmania (wolfram) and on King Island (scheelite). Australia's own requirements are small, and production is principally for export. Australian production of tungsten concentrates could be doubled by the late 1970s when the planned increases in production at King Island take effect. A major expansion program at the wolfram mine at Mareeba, Queensland, will be completed at the end of 1976.

Uranium. Exploration and development work continued in the Alligator River's uranium province in the Northern Territory. The four major deposits at Nabarlek, Koongarra, Ranger and Jabiluka have reserves in excess of 310,000 tonnes uranium.

Other important deposits have been outlined at Yeelirrie, Western Australia (42,000 tonnes uranium) and at the Beverley deposit (13,500 tonnes uranium) in the Lake Frome region, South Australia. At Mary Kathleen, Queensland, recoverable reserves have been estimated at almost 8,500 tonnes uranium; uranium oxide production commenced in 1976.

There has been no production of uranium oxide since 1971 in Australia.

A pilot plant for uranium oxide production will be constructed by 1978 using ore from Yeelirrie. The company hopes to be in full commercial production in 1980–81.

Administration

All mineral rights in Australia are vested in the Crown except on land which was granted before the Crown began to reserve mineral rights. In practice these private mineral rights are important only in the New South Wales coalfields. In the States, rights are held by the State Governments and in the Territories of the Commonwealth these rights are vested in the Commonwealth Government. The Commonwealth Government is able also to influence over-all development and production activity in the mineral industry by virtue of its statutory powers with respect to international trade, customs and excise, taxation, and loan raisings. Certain specially formed bodies such as the Joint Coal Board and the Australian Atomic Energy Commission have been given administrative responsibility in defined areas.

Control of mining

Each State or Territory has its own mining Acts or Ordinances and regulations governing the prospecting for and working of mineral deposits. Before the commencement of the Acts mentioned in the next paragraph these Acts, etc., were similar in principle, but different in detail. They all made provision for miner's rights to prospect and for small mining leases for mineral production. The principles embodied in these Acts, etc., were established many years ago when mining operations were generally small scale and labour-intensive. Although amendments had been enacted to modernise the legislation, it was generally inadequate for the large scale capital intensive operations often involved with modern mineral development. For this reason a large enterprise may take the course of acquiring mining titles by negotiation with the appropriate Minister for Mines and having the agreed terms and conditions embodied in an Act of the State Parliament. This method of acquisition has been used in several cases where the leasing company undertook an obligation (such as the erection of a large treatment works) in return for leases over large areas for a long period, and has become more common in recent years (e.g. iron ore in Western Australia, coal and bauxite in Queensland, bauxite in the Northern Territory).

Two States have brought into operation new mining acts, i.e. *The Queensland Mining Act of* 1968 *to* 1971 which commenced on 1 January 1972 and The South Australian Mining Act, 1971 which commenced on 3 July 1972. These Acts are simpler and more suited to modern conditions than the mining acts which they replaced. Western Australia and New South Wales introduced Bills for new mining acts into their respective Parliaments in 1972. The New South Wales Act was passed in 1973 and became operative in March 1974. The proposed Western Australian legislation was still in the form of a bill in March 1976.

AREAS OCCUPIED UNDER MINING ACTS AND ORDINANCES(*a*)

('000 hectares)

Year (31 December)	*N.S.W.(b)*	*Vic.(c)*	*Qld(d)*	*S.A.(b)*	*W.A.*	*Tas.*	*N.T.(b)*	*Total*
1971 . .	464	498	1,589	55	3,165	25	41	5,837
1972 . .	656	133	1,405	59	1,721	26	48	4,048
1973 . .	(*e*)1,115	25	1,258	58	1,850	36	51	4,393
1974 . .	n.a.	24	1,217	48	1,653	36	59	n.a.
1975 . .	n.a.	24	1,294	43	1,297	n.a.	62	n.a.

(*a*) Excludes areas held under special arrangements; *see* following text. (*b*) At 30 June. (*c*) Includes land held under *Extractive Industries Act* 1966. (*d*) Excludes lands held under miners' rights and dredging claims. (*e*) Figures not comparable with previous years; Includes some new coal titles, as defined by the *Coal Mining Act* 1973.

Control of exploration

This section refers in general to the exploration for all types of mineral deposits in Australia. Additional information relating to the search for petroleum is set out in the following section.

As a result of the introduction of large scale modern prospecting methods (particularly airborne prospecting), the small prospecting areas referred to in the previous section were found to be unsuitable in some instances, and steps have been taken in the States and Territories to ensure the availability of large areas for prospecting by interested persons. Large areas may be made available by provision within the Mining Acts or Ordinances for the issue of authorities to prospect over an area defined by a written agreement which also sets out provisions as to the amount of money to be spent, methods of prospecting, tenure of the agreement, etc.

The tenure of such areas is limited, usually to one or two years only, and, if renewed for a further period, is only over an area selected from the larger area (usually 50 per cent) as a result of work done during the life of the initial agreement. It does not give the holder any rights over, or authorities to prospect on, land already held under a mining title within the agreed area. Unless specifically stated in an agreement, the discovery of minerals, whether inside or outside an area covered by an authority to prospect, gives the discoverer no legal rights except the right to apply for a mining lease over the area in which the discovery was made. Suitable prospects are converted to mining tenements by making application for lease under the appropriate mining Act.

Control of petroleum exploration

On-shore. In Australia all petroleum is the property of the Crown. Consequently, full control of petroleum mining rights is vested in the Government or Administration of each State or Territory. Any company, organisation or individual proposing to undertake petroleum exploration or development must first satisfy the Government concerned that the necessary financial and technological resources are available to carry out the operation.

There are three main types of petroleum titles:

(*a*) the permit, covering initial geological, geophysical and exploration drilling;
(*b*) the licence (in Victoria only), which covers detailed surveys and drilling; and
(*c*) the lease, which covers development operations and production.

Further details of the petroleum legislation are given in Year Book No. 55, pages 996–7. The States of Western Australia and South Australia recently issued some revisions to their on-shore legislation, for details of which direct reference should be made to the State concerned.

Off-shore. The *Petroleum* (*Submerged Lands*) *Act* 1967 is the instrument whereby the control and safeguarding of the exploration and exploitation of petroleum resources on the territorial sea-bed and on the continental shelf are assured. Complementary legislation has been passed by each State Government and by the Commonwealth Government.

The legislation provides for a two-stage system of titles: the exploration permit, which covers all forms of exploration including drilling; and the production licence, which covers development and exploration. Royalty is generally shared between State and Commonwealth Governments on a 60 : 40 basis, however, overriding royalty is payable to the State under certain conditions. Mineral royalty receipts of government under these Acts are included in the table on page 934.

AREAS OCCUPIED UNDER PETROLEUM EXPLORATION AND DEVELOPMENT TITLES

Year (31 December)	*N.S.W.*	*Vic.*	*Qld*	*S.A.(a)*	*W.A.*	*Tas.*	*N.T.(a)*	*Total*
ON-SHORE AREAS (square kilometres)								
1971 . .	196,145	47,892	885,596	569,710	n.a.(*b*)	596	149,530	n.a.
1972 . .	86,728	51,442	1,296,085	567,187	n.a.(*b*)	..	149,530	n.a.
1973 . .	158,164	34,582	692,500	599,293	n.a.(*b*)	16	163,504	n.a.
1974 . .	101,564	20,064	618,600	596,415	n.a.(*b*)	..	152,422	n.a.
1975 . .	44,612	9,704	532,500	290,900	n.a.(*b*)		127,040	n.a.
OFF-SHORE AREAS (5 minute blocks) (*c*)								
1971 . .	782	1,178	2,918	3,089	8,727	1,703	3,534	21,931
1972 . .	503	1,178	2,918	3,089	10,171	1,498	3,535	22,892
1973 . .	433	1,178	2,918	3,089	9,828	1,498	4,283	23,227
1974 . .	53	939	2,221	2,685	8,032	475	9,024	23,429
1975 . .	..	529	1,954	1,398	2,231		6,843	

(*a*) At 30 June. (*b*) Available only in terms of 5 minute blocks of which there were 6,510 at 31 December 1971, 8,036 at 31 December 1972, 7,260 at 31 December 1973, 5,413 at 31 December 1974, and 1,679 at 31 December 1975. (*c*) Area bounded by 5 minutes of latitude and 5 minutes of longitude; figures include partial blocks.

Mineral royalties

The collection by governments of royalties for the production of minerals within their area of authority is an internationally accepted practice. In Australia the responsibility for mineral royalties is largely a State concern, and all States currently collect some form of mineral royalty payments. In the past most States have relied on an established system of standard rates which were uniform for all producers of any particular mineral in the State concerned. These charges were either a fixed monetary amount per tonne (e.g. 5c per tonne on gypsum mined in New South Wales) or an *ad valorem* royalty (e.g. 1.5 per cent of gross value of gold produced in New South Wales).

In recent years there has been an important basic change in the system of establishing royalty commitments, and it is now quite common for State Governments to negotiate special royalty rates with companies which are seeking mineral leases for large scale developments. These royalty rates may vary, depending on whether production is for export or for domestic processing. The rates for a particular mineral may also vary between producers. Important examples of this type of royalty agreement are the iron ore development agreements in Western Australia and coal development agreements in Queensland. Mineral royalties received by Governments in recent years are shown in the table below.

MINERAL ROYALTY RECEIPTS: GOVERNMENTS
($'000)

	1969–70	*1970–71*	*1971–72*	*1972–73*	*1973–74*
New South Wales(*a*)	13,558	17,819	10,237	9,592	13,496
Victoria(*b*)	2,736	12,239	16,875	18,025	23,922
Queensland(*a*)	3,039	5,483	3,805	3,525	4,319
South Australia	1,557	1,798	1,821	1,807	1,944
Western Australia	15,700	22,347	25,247	27,666	33,615
Tasmania(*c*)	424	410	489	498	506
Northern Territory . . .	449	431	634	910	(*d*)242
Commonwealth Government(*e*) .	492	5,024	7,567	7,896	10,786
Total	**37,953**	**65,552**	**66,676**	**69,921**	**88,831**

(*a*) Includes royalty on sand and gravel from Crown lands. (*b*) Includes royalty on brown coal paid by State Electricity Commission and royalties received under the *Petroleum* (*Submerged Lands*) (*Royalty*) *Act* 1967. (*c*) Includes rent and fees from mineral lands and royalties on iron ore. (*d*) Excludes Aboriginal Benefits Trust Fund royalties from mining operations for which details are not available. (*e*) Includes royalties received under the *Petroleum* (*Submerged Lands*) (*Royalty*) *Act* 1967.

Control of Exports

The Commonwealth Government maintains export controls over certain metals, petroleum and petroleum products and all raw and semi-processed minerals. These controls are administered under the authority of the Customs (Prohibited Exports) Regulations as amended from time to time by Statutory Rules. The authorities having jurisdiction over such exports are set out below together with listings of the goods subject to control. A clearance to export is needed in each case.

Minister for National Resources—An amendment to the Customs (Prohibited Exports) Regulations on 22 February 1973 (Statutory Rule No. 39 of 1973), and further amended by Statutory Rules 1973/248 and 1974/46, provides that the exportation from Australia of the following goods is prohibited unless approval in writing is issued by the Minister for National Resources or by an authorized person.

(*a*) ores containing copper or tin, whether or not they have been subjected to processing or treatment; mineral or metallic substances produced in the course of processing or treatment of those ores; copper anodes, copper cathodes; copper ingots, copper rods, copper scrap and copper refinery shapes in the form of ingots, wire bars, billets, cakes, rolling blocks or ingot bars; copper alloys in the form of ingots, billets, cakes, rolling blocks or ingot bars and copper alloy scrap; substances (being residues, speiss, slag, dross, scale, sweepings, ash, sludge, slime, dust and wastes) produced in the course of the processing and treatment of copper and copper alloys; copper sulphate; copper oxide; refined tin in the form of ingots or in any other refinery form;

(*b*) alumina;

(*c*) petroleum and petroleum products;

(*d*) all other minerals including those other minerals that have been subjected to processing or treatment; substances produced in the course of processing or treatment of those other minerals but not including refined products obtained by or from processing or treatment of those other minerals and goods into which products, whether refined or not, obtained by or from processing or treatment of those other minerals have been converted.

In addition, the export of metals and minerals of atomic energy significance are also controlled, viz.: minerals containing uranium and thorium, uranium, thorium, beryllium and lithium metals, compounds and alloys; hafnium-free zirconium metal, alloys and compounds, nickel metal in certain forms.

Department of Primary Industry—phosphate rock, phosphate and superphosphate, and fertilisers containing phosphate or superphosphate.

Joint Coal Board

The Joint Coal Board was established in 1946 under joint legislation of the Commonwealth Government and of the State of New South Wales to carry out special administrative functions in regard to the New South Wales black coal mining industry. A summary of these functions is given below.

(i) To ensure that coal is produced in the State of New South Wales in such quantities and with such regularity as will meet requirements throughout Australia and in trade with other countries;

(ii) to ensure that the coal resources of the State are conserved, developed, worked and used to the best advantage in the public interest;

(iii) to ensure that coal produced in the State is distributed and used in such manner, quantities, classes and grades, and at such prices as are calculated best to serve the public interest and secure the economical use of coal and the maintenance of essential services and industrial activities; and,

(iv) to promote the welfare of workers engaged in the coal industry in the State.

Queensland Coal Board

The Queensland Coal Board carries out research and sampling tests of Queensland coals. It also makes funds available to colliery proprietors for equipment and makes grants and/or loans for the provision of amenities for employees and for communities in coal mining districts.

Australian Atomic Energy Commission

During 1953, legislation was enacted to set up an Atomic Energy Commission which is responsible, in an overall sense, for the production and utilisation of uranium in Australia. This Act, the *Atomic*

Energy Act 1953, superseded the *Atomic Energy (Control of Materials) Act* 1946, but retains a provision of that Act which provides for the control of substances which could be used for production or use of atomic energy.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium and is empowered to co-operate with the appropriate authorities of the States in connection with these and related matters. Secondly it is authorised to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research and generally fostering the advancement of atomic energy technology. The Commission operates under the direction of the Minister for National Resources.

Government assistance

The Commonwealth Government and the various State Governments provide assistance to the mineral industry in a variety of ways. The main forms of assistance are discussed below.

Commonwealth Government assistance

Assistance provided by the Commonwealth Government takes the form of income taxation concessions, subsidies, bounties, and technical assistance mainly through the work of the Bureau of Mineral Resources and the Commonwealth Scientific and Industrial Research Organization. A table showing direct Commonwealth Government payments to sectors of the mineral industry is included on page 938.

Income taxation concessions. Income derived from mining principally for gold in Australia is exempt from tax. The exemption is also available in respect of income derived from mining principally for gold and copper if the value of the gold obtained is not less than 40 per cent of the value of the total output.

Special deductions for capital expenditure incurred in the discovery and mining of petroleum (including natural gas) are allowable to a company deriving income from the sale of petroleum and products of that petroleum, mined by the company in Australia. Capital expenditure allowable to petroleum mining companies includes, broadly, the cost of exploratory surveys, drilling and well-head plant, access roads and expenditure on housing and welfare. In effect, a company is entitled to these deductions only when it produces Australian petroleum in commercial quantities because the special deductions are allowable only from income derived from the company's Australian produced petroleum or associated products. While the special deductions for exploration expenditure are allowable immediately against petroleum income, the deductions for capital expenditure on development are allowable over the life of the oil or gas field, or twenty-five years, which ever is the lesser.

A company mining or prospecting for minerals other than petroleum and gold may also be allowed special deductions for capital expenditure. Broadly, allowable capital expenditure includes expenditure on exploration and prospecting, preparation of a site for extractive mining operations, buildings, other improvements and plant necessary for those operations, access roads, certain treatment plant and housing and welfare.

The allowable capital expenditure of a general mining company, other than costs of exploration, may be deducted over the life of the mine, or twenty-five years, whichever is the lesser. Expenditure incurred by a mining company in exploring for general minerals is allowable as an immediate deduction against net income derived from mining operations. Annual deductions for depreciation on mining plant may be allowed in lieu of spreading the cost over the life of the mine. Exploration plant may also be deducted under the depreciation provisions of the law.

Special deductions are allowable for capital expenditure incurred on certain transport facilities used primarily and principally in relation to minerals mined in Australia, for the transport of raw minerals and certain specified products obtained from the processing of such minerals, or for transporting petroleum between the oil or gas field and a refinery or other terminal. The special deduction applies to expenditure incurred on a railway, road, pipeline or similar transport facility. Allowable expenditure on transport facilities is deductible in equal annual instalments over a period of twenty years. The extension of these concessions to mining and exploration activities carried on in Papua New Guinea was generally withdrawn from the time Papua New Guinea attained independence (16 September 1975).

Petroleum search subsidy. The petroleum search subsidy scheme, introduced in 1957, was terminated on 30 June 1974. During the years that the scheme was in operation, various amendments to the Act and Regulations altered the rates of subsidy and the types of operations to which subsidies were applicable. The last amendment to the Act, introduced in 1969, extended the duration of the Act to 30 June 1974, and restricted the general availability of subsidy to onshore areas; operations in offshore areas were only subsidised if there was an Australian financial interest in the operation and the rate of subsidy approved had regard to the extent of that interest. In March 1972, the subsidy for approved onshore geophysical operations was increased to 50 per cent of acceptable costs of the operation. For all other approved operations the maximum subsidy was 30 per cent of acceptable costs. Details of amendments to the Petroleum Search Subsidy Act are given on page 1001 of Year Book No. 55. Subsidy payments made under the Act for the years 1969 to 1975 are shown in the table on page 938.

Pricing of Australian crude oil. The Commonwealth Government announced a new approach to the pricing of Australian crude oil from 18 September 1975 to provide the maximum practicable incentive for exploration of new oil fields and to give existing producers from known discoveries a fair return on their investment which would ensure that all economically recoverable oil is produced from known oil fields.

This policy differentiates between oil produced from fields discovered in the future and oil produced from fields already discovered.

Oil from newly discovered fields will attract a price at the nearest refinery port equivalent to the landed cost of imported crude oil from time to time. On the basis of the present landed cost this would mean, after allowance for the $2.00 per barrel excise on oil production, a return of around $6.90 per barrel to producers of new oil.

The prices for oil produced from the following fields are as follows:

Gippsland/Bass Strait. Increase of 23 cents per barrel to $2.33 for all production from 18 September 1975.

Barrow. Increase of 50 cents per barrel to $2.73 from 18 September 1975, then further increases to $2.88 from 18 September 1976 and $3.17 from 18 September 1977.

Moonie. Increase of 85 cents per barrel to $3.00 from 18 September 1975, then further increases to $4.35 from 18 September 1976 and $5.25 from 18 September 1977.

The varying prices have regard to the varying costs of the respective producers. The pricing levels indicated above for oil from fields already discovered will apply for 3 years. The pricing levels to apply from September 1978 to September 1980 will be reviewed by the Industries Assistance Commission, which will also be asked to make recommendations on all aspects of Australian crude oil policy after 1980, when the present indigenous crude oil absorption arrangements expire.

Assistance to the gold-mining industry. Assistance to the gold-mining industry by subsidy was introduced at a time of rising costs in the industry and fixed official world price for gold. Because many producers were faced with the likelihood of closing down, the Government decided to subsidise marginal producers in Australia and Papua New Guinea. Under the *Gold-Mining Industry Assistance Act* 1954 a producer, the value of whose gold output exceeded 50 per cent of the total value of his mine output, was eligible for assistance, subject to certain conditions, on the production of gold from 1 July 1954. The assistance scheme was reviewed on a number of occasions since the Act was originally passed, and some liberalisations were approved, including increases in the rates of subsidy payable authorised in amendments passed in 1957, 1959, 1965 and 1972.

Under the Act in 1974 and 1975 the subsidy payable to small producers whose annual deliveries did not exceed 500 fine oz was $6 per fine oz, irrespective of cost of production. For large producers, subject to certain provisions, the rate of subsidy payable was an amount equal to three-quarters of the excess of the average cost of production over $27 per fine oz, with a maximum amount of subsidy of $12 per fine oz. A producer whose deliveries during the year exceeded 500 fine oz could elect to be treated as a small producer. In this case the subsidy rate payable per fine oz on total deliveries was $6 reduced by 1c for each fine oz by which deliveries exceeded 500 fine oz. The benefit under this provision terminated when deliveries in a year reached 1,100 fine oz. Where a producer received an amount in excess of $31.25 per fine oz on market sales of gold, the subsidy payable was, with effect from 1 January 1972, reduced by fifty per cent of the amount of the excess. Increases in the market price of gold since 1972 have resulted in a decline in subsidy payments in succeeding years.

Payments under the Act applied to production until 30 June 1975 when the application of the Act expired. The amounts paid to gold producers in recent years are shown in the table below.

Assistance to the producers of sulphuric acid and iron pyrites. The *Sulphuric Acid Bounty Act* 1954 and the *Pyrites Bounty Act* 1960 expired on 31 May 1972. The Acts provided for payment of bounty on sulphuric acid produced from prescribed Australian materials, and to producers of iron pyrites. Payments under these Acts for recent years are shown in the table below.

Payments to producers of phosphate fertilisers. The *Phosphate Fertilisers Bounty Act* 1963 provides for a bounty to be paid on superphosphate and ammonium phosphate manufactured and used in Australia as a fertiliser. (This includes approved trace elements, compounds or substances when added to superphosphate). Bounty is payable on the soluble content of phosphorus pentoxide. A standard grade of superphosphate containing between 19.5 and 20.5 per cent soluble content of phosphorus pentoxide qualifies for full bounty of $11.81 per tonne. Outside this range, bounty is payable at $59.05 per tonne of contained phosphorus pentoxide. The intention of this Act is to assist consumers of phosphate fertilisers (primary producers). The Act expired on 31 December 1974 but the Government has re-introduced the bounty from 11 February 1976 to 30 June 1977. Payments under the Act, are set out in the following table.

COMMONWEALTH GOVERNMENT PAYMENTS TO THE MINERAL INDUSTRY AND TO THE MANUFACTURING INDUSTRY FOR PRODUCTS OF MINERAL ORIGIN: AUSTRALIA

($'000)

Year	*Petroleum exploration (a)*	*Gold mining(b)*	*Pyrites mining(c)*	*Sulphuric acid production (d)*	*Phosphate fertiliser production (e)*
1971	8,468	(*f*)2,162	568	489	40,815
1972	8,422	(*f*)1,185	962	527	49,137
1973	9,611	(*f*)49	..	..	66,962
1974	7,397	(*g*)−1	..	..	29,507
1975	3,039	..	..	..	..

(*a*) *Petroleum Search Subsidy Act* 1959. Includes payments in Papua New Guinea; *see also* the table on page 964. (*b*) *Gold-Mining Industry Assistance Act* 1954. This Act expired 30 June 1975. (*c*) *Pyrites Bounty Act* 1960. This Act expired on 31 May 1972. (*d*) *Sulphuric Acid Bounty Act* 1954. This Act expired on 31 May 1972. (*e*) *Phosphate Fertilisers Bounty Act* 1963. (*f*) Includes payment in Papua New Guinea. (*g*) Repayment of advance.

Bureau of Mineral Resources, Geology and Geophysics. The functions of BMR are as follows:

(i) as a primary function, to obtain, study, publish and provide basic geological and geophysical information necessary for the exploration and development of the nation's mineral resources; this to be done where appropriate in co-operation with State and Territorial authorities;

(ii) to undertake experimental studies and research into geology and geophysics in order to support the function of obtaining basic information;

(iii) to make basic investigations of the earth's magnetic and gravitational fields and in seismology and vulcanology;

(iv) to complement the work of the State and Territorial authorities by undertaking geological and geophysical investigations into the occurrence and distribution of underground water;

(v) to undertake geological and geophysical investigations on behalf of other Commonwealth Government Departments and authorities including the provision of resident staff by arrangement with the Territories;

(vi) to obtain basic information on, and review the mineral resources of Australia and its Territories; to study the various sectors of the mineral industry both in the national and international spheres; to publish and provide information about the mineral industry;

(vii) to undertake such investigations in mining engineering and petroleum technology as are relevant to (i) and (vi) above;

(viii) to prepare advice for Government on the mineral industry, including the exploration and development of mineral resources in the national interest;

(ix) when directed by Government, to administer schemes for the assistance of sectors of the mineral industry and to undertake special mineral projects.

BMR comprises five branches under the Director: Operations, Mineral Resources, Geological, Geophysical, and Petroleum Exploration. The Operations Branch consists of four sections, Planning and Co-ordination, Publications and Information, Automatic Data Processing Applications and Administrative. It carries out central office functions, including planning and control of program, assessment of results, co-ordination of activities, liaison, distribution of information and provision of ADP services. The Mineral Resources Branch comprises the sections Mineral Economics, Mining Engineering, and Petroleum Technology, and is concerned largely with those aspects of

BMR's work which involve studies of the mineral industry as a whole, and the preparation of advice and reviews for the Government, industry and the public. The Geological and Geophysical Branches are responsible for the principal field activities of BMR, and the operation of observatories, while the Petroleum Exploration Branch is concerned with the technical administration of the *Petroleum* (*Submerged Lands*) *Act* 1967 and the assessment of sedimentary basins in Australia and its Territories. The establishment of BMR is 636 officers (at 31 December 1975) and includes 270 professional officers (geologists, geophysicists, chemists, engineers and mineral economists).

BMR maintains a laboratory in Canberra which is engaged on geochemical, geochronological and petroleum technological studies and basic research into the design and testing of geophysical equipment. It also maintains geophysical observatories at Toolangi (Victoria), Mundaring (Western Australia), Port Moresby (Papua New Guinea), Mawson (Antarctica), and Macquarie Island. The geophysical observatories are engaged in magnetic, ionospheric, and seismic investigations and are base stations for field operations.

State Government assistance

In addition to free assays and determinations of rocks and minerals carried out for prospectors by the Mines Departments of the States and Territories, technical officers of these departments provide advice to the mining and allied industries where required, carry out field examinations of mining prospects, advise on exploration and development, select sites for water supply, and in general give a free technical service to the mining industry.

New South Wales. The State Mines Department renders scientific, technical and financial assistance to the mining industry. Grants are made to cover up to half the cost of prospecting and drilling operations. These grants are repayable if sufficient pay minerals are discovered or if certain other conditions are met. A quantity of equipment is also available for hire in several localities. The Department has itself undertaken a program of contract drilling to investigate the existence of mineral deposits in the State (including the testing and proving of coal resources). Expenditure on financial assistance in 1974–75 amounted to $523,636 including $154,034 on the Department's own drilling program.

Victoria. The Mines Department conducts geological and mineral surveys and produces geological maps and issues scientific and technical reports thereon. Extensive rotary, percussion and auger drilling operations are carried out and in conjunction with these, sedimentary basin studies are made to evaluate petroleum, mineral and groundwater potential. A comprehensive library and a geological museum are maintained and a core library retains cores and cuttings from drilling operations. The administration of petroleum, pipeline, mining and extractive industry legislation ensures that petroleum exploration and production, both on-shore and off-shore, mining and quarrying are carried on in a safe and effective manner. Technical and drilling assistance and loans or grants are available for mineral exploration and prospecting and for approved development operations. Six stamp batteries provide an ore crushing service to enable test crushings to be made at nominal cost. Information is available on mining law and mineral statistics. Assays of ores, analytical services, advice on metallurgical treatments, industrial pollution and chemical problems are available together with information on the manufacture, handling and use of explosives and inflammable liquids. Financial assistance is available to municipalities to reclaim mine-damaged land, in areas where a Reclamation Committee recommends such action.

Queensland. The Department of Mines provides assistance to mining by way of geological services, grants for construction and maintenance of roads in mining areas, repayable advances or subsidies for mine development, hiring of equipment, and assistance to prospectors. The Department maintains a concentration plant for tin ores at Irvinebank, an assay office at Cloncurry and diamond drilling plants in various parts of the State. The Queensland Coal Board carries out research and sampling tests of Queensland coals. It also makes funds available to colliery proprietors for equipment and makes grants and/or loans for the provision of amenities for employees and for communities in coal mining districts.

South Australia. The Department of Mines provides the following services and facilities to the mineral industry: (i) drilling and testing of mineral deposits, geophysical investigations, well logging development of sub-surface water supplies for farming, pastoral, irrigation, and mining purposes; (ii) geological examination of mineral deposits, ground water supplies, dam foundation and drainage problems, and publication and issue of geological bulletins and maps. It also provides, through the Australian Mineral Development Laboratories, facilities for chemical, metallurgical, analytical and assay investigations, testing and treatment of ores and minerals, and petrographic, mineragraphic and radiometric determinations. Pilot scale metallurgical and chemical treatment plants are maintained and operated for the development of mineral extraction processes.

Western Australia. Prospectors receive assistance of either $15 or $17.50 a week according to the prospecting locality. North of the 26th parallel and within a defined area south of this, lying largely outside the agricultural areas, assistance is given to the extent of $17.50 a week. In the remainder of the State prospectors receive $15 a week. Provision is also made for the supply of some tools required for prospecting. There are sixteen State batteries operating intermittently throughout the goldfields for the treatment of ore from prospectors and small mine owners at a nominal charge. A cartage subsidy is also granted to such operators sending gold and lead ores to State batteries for treatment. Provision is made for loans to mine-owners who require assistance to develop mines.

Tasmania. The Department of Mines provides financial assistance to mining lessees for the purchase of plant and machinery, for sinking, repairing or de-watering of shafts, for construction of dams and water races, for testing and proving a deposit of any mining product, for developmental work, and for diamond and other types of drilling. The Department has available for hire, percussion and diamond drills for exploration, as well as a complete plant for small shaft sinking and tunnelling. Other assistance is rendered to the industry in the form of geological and engineering advice, through ore-dressing research into metallurgical recoveries, and the selection and design of treatment plant.

Northern Territory. To encourage the development of the mining industry the Mines Branch of the Department of the Northern Territory operates two batteries for the treatment of ores for miners. The Tennant Creek Battery is treating parcels of gold ore. The Mount Wells Battery is crushing parcels of gold, tin, lead, copper and wolfram ore, including experimental work for more complex ores. The crushing charges are subsidised by the Government. Mining plant such as drills, compressors, pumps, and small hoists are available for hire to prospectors. Financial assistance is available to prospectors for mine development such as shaft sinking, driving, rising or winzing, and cartage subsidies. Roads and water supply services are provided and maintained for mines under active development throughout the Northern Territory.

The Northern Territory Geological Survey undertakes geological and geophysical investigations including some engineering geology projects, and is also available to assist with the evaluation of individual mineral occurrences for prospectors and exploration companies. Technical libraries and collections of drill cores and cuttings are maintained in Darwin, Alice Springs and Tennant Creek.

Research

Research investigations into problems of mining, ore-search, ore-dressing and metallurgy are conducted by Government bodies, by universities, by private enterprise, and by combined efforts of these bodies. A summary of their functions follows. (For further information on research *see* Chapter 28 Science and Technology).

Australian Atomic Energy Commission

The Australian Atomic Energy Commission conducts research at its laboratories at Lucas Heights in Sydney on the development of nuclear power, including research on nuclear materials and on metals and ceramics used for nuclear power.

The Australian Mineral Development Laboratories

Technical consulting, contract research and process design for the mineral and associated industries is undertaken by The Australian Mineral Development Laboratories (Amdel), at Adelaide. This organisation is controlled by a council comprising representatives of the mineral industry, the South Australian Government and the Commonwealth Government. Extensive facilities are available in the fields of analytical chemistry, mineralogy and petrology, chemical metallurgy and mineral engineering, operations research/computer services and materials technology. Both long and short term applied research is carried out and all investigations are conducted on a strictly confidential basis. Services in the field of pollution and environmental control are also available through the Amdel group Amdel (Aspect).

The Baas Becking Geobiological Research Laboratory

In 1965 the Baas Becking Geobiological Research Laboratory was established in the Bureau of Mineral Resources Building in Canberra, under the joint sponsorship of the Commonwealth Scientific and Industrial Research Organization, the Bureau of Mineral Resources, and the Australian Mineral Industries Research Association (*see* Research by private enterprise, page 942). The broad objective of the research work is to investigate the biological and chemical processes associated with the formation of mineral deposits of the stratiform type.

Emphasis is placed on investigations to establish the relationship of biological factors to the natural physico-chemical environment with particular reference to the possible role of these factors in the formation and transformation of sulphide minerals. Investigations have included the response of micro-organisms to heavy metals; biochemistry and physiology of oxidative and reductive sulphur transformations; role of organisms in the concentration of mineral elements; physico-chemistry of low-temperature mineral synthesis; and mobility of sulphides under the influence of temperature and pressure and the interaction of mineral types.

Bureau of Mineral Resources, Geology and Geophysics

The Bureau of Mineral Resources is the largest geoscience research organisation in Australia. Its work is directed towards an integrated study of the origin, composition and structure of the rocks forming the Australian continent—to the lower limits of the continental slope—particularly as these affect the genesis and distribution of mineral deposits. The main effort is in field research supported and complemented by laboratory and office studies. BMR's activities include:

Geological, geophysical, and geochemical surveys to provide the basic information for further studies.

Compilation, review, and synthesis of information on and detailed investigations of sedimentary basins and metallogenic provinces, leading to an understanding of their origin and history, and to assessment of their prospectiveness.

Studies of specific commodities, including research into the occurrence and origin of their deposits, assessment of potential for new discoveries, resource inventories, and market trends.

Engineering geology, urban geology and hydrogeological investigations.

Maintenance of seismological and magnetic observatories, and related studies.

Assessment of geophysical techniques in Australian conditions, and development of new techniques and equipment.

Fundamental geoscience research, with an orientation to the activities listed above.

Provision and dissemination of the results of BMR's work and information on the geosciences generally.

For details of the functions of the Bureau of Mineral Resources, Geology and Geophysics, *see* page 938.

Commonwealth Scientific and Industrial Research Organization

Mineral research by the Commonwealth Scientific and Industrial Research Organization is undertaken mainly in the Minerals Research Laboratories comprising the Divisions of Chemical Engineering, Mineral Chemistry, Mineralogy, and Mineral Physics and Process Technology. Major laboratories are located at Clayton (Vic.), Port Melbourne, Sydney and Perth. Current research program objectives and sub-program titles are:

(*a*) *Exploration methods*. To improve and develop procedures for locating mineral deposits (geochemical techniques, geophysical techniques, geological pattern recognition).

(*b*) *Mineralisation*. To improve methods of recognising and defining the nature and economic significance of specific types of mineralisation (nickel deposits, other deposits, hydrogeochemistry, geobiology, mineralogical research techniques).

(*c*) *Mining and concentration*. To identify, and utilise in practice, those properties of minerals and rocks that will increase the overall efficiency of their mining, concentration and handling (rock properties, mineral dressing, transport and fill, iron ores).

(*d*) *Process metallurgy and engineering*. To initiate or improve methods for the scientific development of Australia's natural resources (process control, process development, structures and bonding, hydrometallurgy and pyrometallurgy).

(*e*) *Environment*. To protect and improve the quality of the human and natural environment by applying the skills and expertise available in the Minerals Research Laboratories (air quality, solid and liquid wastes).

(*f*) *Energy*. To support national plans developed to ensure the availability of energy in forms required by consumers and based on indigenous resources (coal utilisation, coal and oil resource characterization, coal winning, low energy metallurgy, storage and conversion).

The minerals industry provides strong support in the form of co-operative research planning, collaborative investigation of specific projects, and financial grants for appropriate developmental work.

National Coal Research Advisory Committee

The National Coal Research Advisory Committee was established in December 1964, following agreement between the Commonwealth Government, State Governments and private industry, for increased applied research in Australia into coal utilisation. This was later extended to cover research into coal winning and beneficiation. Initially a pool of funds amounting to $520,000 per annum was jointly contributed for the sponsorship of this research. These funds were allocated on the advice of the Committee, whose membership was representative of the contributing groups. This agreement was terminated on 30 June 1969, and a new National Coal Research Advisory Committee was nominated by the Commonwealth Government alone. A sum of up to $260,000 per year for up to three years was set aside by the Government for allocation on the advice of this Committee.

As from 30 June 1972, the scheme of assistance to coal research was extended for a further five years, with yearly allocations of $260,000. In 1974–75 the yearly allocation was increased by $100,000 to $360,000 for the specific purpose of initiating an 'oil-from-coal' research program in Australia. The allocation of $360,000 was maintained in 1975–76.

The major beneficiary under this scheme is the Australian Coal Industry Research Laboratories; other beneficiaries are University Departments.

The functions of the Committee are:

(*a*) To keep under review all coal research carried on throughout Australia and overseas, in relation to conservation, winning, beneficiation and utilisation.
(*b*) To reach conclusions on scientific, technical and economic grounds as to the directions in which this research in Australia should be strengthened.
(*c*) To review annually all relevant research programs in Australia, and to recommend to the Minister for National Resources those programs that should be supported, and the amount of financial contributions which should be made to each of them from the funds provided.

University Research

The various universities in Australia carry out research into various aspects of the mineral industry such as geology, ore mineralogy and genesis, mining techniques, mineral processing, extractive metallurgy, and materials and metals technology.

Research by private enterprise

Most large mining and smelting companies have laboratories dealing with their own individual problems. Private industry formed the Australian Mineral Industries Research Association in 1959 to provide industry with representation in the management of the Australian Mineral Development Laboratories. The Association now finances research work into geology, mining and mineral processing at Universities, CSIRO and the Australian Mineral Development Laboratories. Membership of the Association at 30 June 1975 was: full members 50, associate members 22, registered divisions 11. Expenditure on research projects during the year 1974–75 was $421,364.

International relations

Because Australia is a large supplier of certain minerals to the rest of the world and because the welfare of the domestic industry depends to a large extent on the maintenance of a high level of exports, international relations are of considerable importance to the industry, and the Commonwealth Government takes an active role in international consultations and discussions relating to minerals. The most important international commitments are discussed below.

International Tin Agreement

The first International Tin Agreement (of the post-war period) was in operation for five years from 1 July 1956 to 30 June 1961. This Agreement was subsequently replaced by the Second and Third International Tin Agreements, which came into force on 21 February 1962 and 21 March 1967, respectively. Details of these Agreements are given in Year Book No. 57, pages 911–12.

Australia has signed and ratified the Fourth International Tin Agreement which came into operation on 1 July 1971 for a period of 5 years. Australia joined the Fourth Agreement as a 'producing' (i.e. exporting) member, whereas in the past Agreements Australia's status had been that of a 'consuming' (i.e. importing) member. This stems from the fact that Australia's tin production has increased significantly over recent years making it a net exporter of tin.

The objectives of this Agreement are the same as for its predecessors. Producing countries are required to contribute to a buffer-stock-equivalent in cash or tin up to 20,000 tonnes of tin metal, which is used to buffer short-term fluctuations in the world market price. In the event of persistent market disequilibrium through causes beyond the ability of the buffer stock mechanism to control, the agreement also provides for the regulation of exports and stocks to stabilise the market. The main provisions of the Fourth Agreement are substantially the same as those of the Third. However, the Buffer Stock Manager, a paid Council employee charged with operating the buffer stock, has been given somewhat greater flexibility in reacting to market situations.

The International Tin Agreement is operated by the International Tin Council, which is made up of the following Governments: *Producers*—Australia, Bolivia, Indonesia, Malaysia, Nigeria (Federal Republic of), Thailand, Zaire (Republic of). *Consumers*—Austria, Belgium-Luxembourg, Bulgaria, Canada, Czechoslovakia, Denmark, France, Germany (Federal Republic of), Hungary, India, Italy, Japan, Korea (Republic of), Netherlands, Poland, Romania, Spain, Turkey, United Kingdom, Union of Soviet Socialist Republics and Yugoslavia. The producing countries hold a total of 1,000 votes, distributed so that each country receives five initial votes and an additional number corresponding to its percentage as laid down by the Agreement. The consuming countries hold a total of 1,000 votes also distributed so that each country receives five initial votes and an additional number proportionate to quantities consumed. The allocation of votes in each category is periodically reviewed.

The International Tin Agreement establishes floor and ceiling prices for tin and, by the medium of a buffer stock and remedial trading on the London Metal Exchange, aims at confining the price within these limits. Because of a world over-supply situation of tin, the Council imposed export controls on producer members for the period January–September 1973.

International Lead-Zinc Study Group

With the cessation of stockpile buying of lead and zinc by the United States Government in 1958, world producers were faced with the prospect of a serious imbalance between world supply and demand for these metals. To meet this problem a series of meetings of interested governments was held, at which Australia was represented. These meetings culminated in the formation of the International Lead-Zinc Study Group which was established in January 1960. The Study Group comprises the following Governments: Algeria, Australia, Austria, Belgium, Bulgaria, Canada, Czechoslovakia, Denmark, Finland, France, the Federal Republic of Germany, Hungary, India, Italy, Japan, Mexico, Morocco, the Netherlands, Norway, Peru, Poland, the Republic of South Africa, Spain, Sweden, Tunisia, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Yugoslavia and Zambia. The Group provides opportunities for inter-governmental consultations on international trade in lead and zinc and for studies of the world situation in lead and zinc having regard especially to the desirability of providing continuous accurate information regarding the supply and demand position and its probable development.

MINERAL INDUSTRY STATISTICS

Statistics presented in this chapter refer mainly to the mining industry, mineral production, mineral exploration, and overseas participation in the Australian mining industry. In addition to the mining industry, data relating to mineral processing and treatment and overseas trade are included to give more information about the mining industry and other associated activities in the Australian economy.

Mining industry statistics

This section contains statistics of the mining industry for all States and Territories and Australia obtained from the annual Mining Censuses.

Prior to 1968–69 the Annual Mining and Quarrying Census related to years ended 31 December. However, commencing with 1968–69, the Mining Census was changed to a year ended 30 June to conform with the period covered by other economic censuses in Australia. There are several other differences between the censuses of 1968–69 and later years, and those for earlier years (mainly in definition, scope and coverage) and as a result the statistics obtained for 1968–69 and later, are not strictly comparable with those for earlier years. Further information regarding these differences is given in Year Book No. 57, pages 912–914. Mining industry statistics for years prior to 1968–69 are also contained in Year Book No. 57 and earlier issues.

For the year ended June 1969, the Mining Census (including quarrying) was conducted for the first time on an integrated basis with Censuses of Manufacturing, Electricity and Gas, Retail Trade and Selected Services, and Wholesale Trade.

Briefly, the integration of these economic censuses was designed to increase substantially the usefulness and comparability of economic statistics collected and published by the ABS, and to form a basis for the sample surveys which supply current economic statistics from quarter to quarter, particularly those which provide data for the quarterly national income and expenditure estimates. A detailed description of the integrated censuses is contained in Chapter 31, Year Book No. 56.

For 1969–70 and subsequent years the annual Mining Census has been conducted on the same basis as that for 1968–69.

The table below shows key items of data for Australia for 1974–75 and summary data for 1970–71 to 1973–74. Each following table shows statistics for a particular item for all States and Territories and Australia for 1974–75 and summary data for 1970–71 to 1973–74, and is preceded by an explanation of the item.

MINING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY SUB-DIVISION AUSTRALIA

Industry sub-division	*ASIC code(a)*	*Number of establishments operating at end of June*	*Persons employed at end of June(b)*			*Wages and salaries*	*Turnover*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses*	*Value added*	*Fixed capital expenditure (outlay on fixed tangible assets less disposals)*
			Males	*Females*	*Total*			*Opening*	*Closing*			
		No.	No.	No.	No.	$'000	$'000	$'000	$'000	$'000	$'000	$'000
1974–75												
Metallic minerals	11	(c)208	32,570	2,502	35,072	336,220	1,811,929	159,578	212,586	630,049	1,234,887	274,993
Coal	12	132	24,193	483	24,676	265,190	1,574,089	57,299	90,329	400,519	1,206,599	186,972
Crude petroleum including natural gas	13	9										
Construction materials	14	(c)697	6,050	512	6,562	52,980	238,565	15,374	23,031	96,834	149,389	19,177
Other non-metallic minerals	15	(c)269	2,634	178	2,812	22,214	93,047	10,039	14,487	47,300	50,195	15,032
Total mining, excluding services to mining												
1974–75(c)		1,315	65,447	3,675	69,122	676,604	3,717,629	244,290	340,432	1174,702	2,641,069	496,174
1973–74(c)		1,315	61,006	3,050	64,056	481,006	2,798,062	216,389	242,586	828,164	1,996,096	338,573
1972–73(c)		1,330	60,140	2,920	63,060	402,894	2,265,129	210,951	211,775	668,651	1,597,301	322,930
1971–72(c)		1,410	60,222	2,957	63,179	373,999	1,994,261	165,244	211,178	611,888	1,428,307	482,611
1970–71		1,512	59,816	2,826	62,642	325,178	1,814,918	142,298	157,365	540,490	1,289,495	520,575

(*a*) Australian Standard Industrial Classification. (*b*) Includes working proprietors. (*c*) Excludes some very small insignificant establishments. Other than "Number of establishments", these exclusions do not effect any figures by more than one per cent.

Number of establishments

The following table shows the number of establishments operating at end of June. These relate to mining establishments as such and do not include the numbers of separately located administrative offices and ancillary units.

MINING ESTABLISHMENTS: NUMBER OF ESTABLISHMENTS OPERATING AT END OF JUNE BY INDUSTRY SUB-DIVISION

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75										
Metallic minerals	11	(*b*)59	7	(*b*)40	7	69	(*b*)16	10	..	(*b*)208
Coal	12	95	5	27	1	3	1	..	..	132
Crude petroleum including natural gas	13	..	2	4	1	2	..	..	..	9
Construction materials	14	(*b*)205	213	156	54	30	26	5	8	(*b*)697
Other non-metallic minerals	15	(*b*)130	38	30	28	30	13	..	..	(*b*)269
Total mining, excluding services to mining										
1975		(*b*)489	265	(*b*)257	91	134	(*b*)56	15	8	(*b*)1,315
1974		(*b*)498	275	(*b*)241	86	138	(*b*)56	15	6	(*b*)1,315
1973		(*b*)532	261	(*b*)240	94	131	48	15	9	(*b*)1,330
1972		(*b*)572	264	266	104	115	53	26	10	(*b*)1,410
1971		614	266	292	122	122	64	24	8	1,512

(*a*) Australian Standard Industrial Classification. (*b*) Excludes some very small, insignificant establishments.

Employment

The statistics of the number of persons employed shown in the following table relate to working proprietors at the end of June and employees on the payroll of the last pay period in June, including those working at separately located administrative offices and ancillary units in the State. Note that persons employed in each State (and their wages and salaries) relate to those employed at establishments, administrative offices or ancillary units located in the State, even though the administrative offices or ancillary units may have served establishments located in another State.

MINING ESTABLISHMENTS: MALES, FEMALES AND PERSONS EMPLOYED(*a*) BY INDUSTRY SUB-DIVISION, AT END OF JUNE 1975

Industry sub-division	*ASIC code(b)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
MALES EMPLOYED										
1974–75—										
Metallic minerals	11	6,176	2661	8,334	1,798	11,586	3,924	1,031	..	32,570
Coal	12	14,962		5,252		957	(*c*)	..	..	24,193
Crude petroleum including natural gas	13			(*c*)			..	..	..	
Construction materials	14	1,752	1,866	1,181	509	414	163	64	101	6,050
Other non-metallic minerals	15	1,004	233	(*c*)	309	673	(*c*)		..	2,634
Total mining, excluding services to mining—										
1975		**23,894**	**4,760**	**15,119**	**2,616**	**13,630**	**4,232**	**1,095**	**101**	**65,447**
1974		22,582	4,796	13,595	2,302	12,102	4,139	1,415	75	61,006
1973		22,843	5,132	12,955	2,354	11,221	4,150	1,409	76	60,140
1972		24,192	5,560	12,308	2,293	9,816	4,449	1,513	91	60,222
1971		24,640	5,189	11,859	1,866	10,285	4,463	1,427	87	59,816
FEMALES EMPLOYED										
1974–75—										
Metallic minerals	11	219	159	664	197	1,144	211	84	..	2,502
Coal	12	186		105		13	(*c*)	..	..	483
Crude petroleum including natural gas	13			(*c*)			..	..	..	
Construction materials	14	92	206	91	43	72	4	1	3	512
Other non-metallic minerals	15	64	13	(*c*)	7	72	(*c*)		..	178
Total mining, excluding services to mining—										
1975		**561**	**378**	**882**	**247**	**1,301**	**218**	**85**	**3**	**3,675**
1974		579	354	738	177	943	178	80	1	3,050
1973		576	394	733	196	780	176	64	1	2,920
1972		662	455	735	218	621	191	74	1	2,957
1971		642	394	690	128	704	197	68	3	2,826
PERSONS EMPLOYED										
1974–75—										
Metallic minerals	11	6,395	2820	8,998	1,995	12,730	4,135	1,115	..	35,072
Coal	12	15,148		5,357		970	(*c*)	..	..	24,676
Crude petroleum including natural gas	13			(*c*)			..	..	..	
Construction materials	14	1,844	2,072	1,272	552	486	167	65	104	6,562
Other non-metallic minerals	15	1,068	246	(*c*)	316	745	(*c*)		..	2,812
Total mining, excluding services to mining										
1975		**24,455**	**5,138**	**16,001**	**2,863**	**14,931**	**4,450**	**1,180**	**104**	**69,122**
1974		23,161	5,150	14,333	2,479	13,045	4,317	1,495	76	64,056
1973		23,419	5,526	13,688	2,550	12,001	4,326	1.473	77	63,060
1972		24,854	6,015	13,043	2,511	10,437	4,640	1,587	92	63,179
1971		25,282	5,583	12,549	1,994	10,989	4,660	1,495	90	62,642

(*a*) At end of June; includes working proprietors. (*b*) Australian Standard Industrial Classification. (*c*) Not available for publication.

Mining accidents

Particulars of numbers of persons killed and injured in accidents in mines and associated treatment plants are recorded by State Mines Departments. Numbers injured are not reported on a uniform basis in all States, as varying criteria are used in determining what constitutes injury. A table setting out mining accidents by States is shown below.

MINING ACCIDENTS(*a*)

	Metal mining		*Fuel mining*		*Construction material quarrying(b)*		*Non-metal (excluding fuel) mining*		*Total mining and quarrying*	
	Number of casualties		*Number of casualties*		*Number of casualties*		*Number of casualties*		*Number of casualties*	
	Killed	*Injured*	*Killed*	*Injured*	*Killed*	*Injured*	*Killed*	*Injured*	*Killed*	*Injured*
1974–75—										
New South Wales	1	173	12	53	1	7	..	15	14	248
Victoria	1	..	..	32	..	(*c*)42	..	(*c*)1	1	(*c*)75
Queensland	2	162	4	242	..	7	..	8	6	419
South Australia	..	35	..	5	1	17	..	2	1	59
Western Australia	(*c*)13	(*c*)534	1	143	1	10	1	23	(*c*)16	(*c*)710
Tasmania	4	192	..	2	..	1	..	1	4	196
Northern Territory	1	34	..	..	..	..	..	..	1	34
Australian Capital Territory	..	..	..	..	(*b*)	(*b*)	..	..	(*b*)	(*b*)
Australia(*b*)(*c*)	**22**	**1,130**	**17**	**477**	**3**	**84**	**1**	**50**	**43**	**1,741**
1973–74(*b*)	19	1,046	10	478	6	111	3	50	38	1,685

(*a*) *See* text regarding comparability between States. (*b*) Mining accident data for construction material quarrying in the A.C.T. are not available. (*c*) These figures include some accidents in the mineral processing industry, and, in Western Australia, in electricity generating plants at the mine site.

Wages and salaries

The following table shows the wages and salaries of all employees of the establishment, including those working at separately located administrative offices and ancillary units in the State. Drawings of working proprietors are not included.

MINING ESTABLISHMENTS: WAGES AND SALARIES BY INDUSTRY SUB-DIVISION

($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75—										
Metallic minerals	11	59,779	31,080	88,804	16,706	117,158	40,993	15,387	..	336,220
Coal	12	164074		58,385		8,445	(*b*)	..	..	265,190
Crude petroleum including natural gas	13			(*b*)			..	..	..	
Construction materials	14	15,522	16,033	9,208	4,179	5,580	1,041	526	897	52,980
Other non-metallic minerals	15	7,613	2,125	(*b*)	2,272	6,781	(*b*)		..	22,214
Total mining, excluding services to mining—										
1974–75		**246,988**	**49,238**	**159,420**	**23,158**	**137,964**	**43,026**	**15,913**	**897**	**676,604**
1973–74		171,521	39,337	114,602	15,115	96,255	30,623	12,937	616	481,006
1972–73		149,950	33,154	95.039	13,367	71,946	28,091	10,843	503	402,894
1971–72		147,098	32,194	83,087	12,255	62,388	26,456	10,066	453	373,999
1970–71		131,973	27,518	69,211	8,459	55,941	22,641	8,702	471	324,915

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Turnover

The following table shows turnover (sales of minerals and other goods whether produced by the establishment or not, plus transfers out of minerals and other goods to other establishments of the same enterprise, plus all other operating revenue from outside the enterprise, such as commission, repair and service revenue). This item excludes rents, leasing revenue, interest, royalties, and receipts from the sale of fixed tangible assets.

MINING ESTABLISHMENTS: TURNOVER, BY INDUSTRY SUB-DIVISION
($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75—										
Metallic minerals	11	247,082	474,209	375,766	83,089	915,753	120,489	89,589	..	1,811,929
Coal	12	557,381		466,423		52,594	(b)	..	..	1,574,089
Crude petroleum including natural gas	13	..		(b)			..	..	..	
Construction materials	14	74,894	76,044	42,670	15,142	18,826	4,871	2,006	4,111	238,565
Other non-metallic minerals	15	31,179	10,197	(b)	14,967	23,489	(b)		..	93,047
Total mining, excluding services to mining—										
1974–75		**910,536**	**560,449**	**899,390**	**113,198**	**1,010,661**	**127,688**	**91,596**	**4,111**	**3,717,629**
1973–74		591,702	467,661	656,858	110,324	736,124	144,917	87,665	2,813	2,798,062
1972–73		499,187	377,783	462,594	108,608	653,049	95,350	66,010	2,547	2,265,129
1971–72		483,654	336,464	345,568	96,034	593,944	88,675	47,747	2,176	1,994,261
1970–71		473,497	270,659	323,536	96,856	527,107	78,057	41,336	2,187	1,813,235

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Purchases, transfers in and selected expenses

The following table shows the total of purchases of electricity, fuels, stores and other materials, transfers in of goods from other establishments of the same enterprise, charges for processing and other commission work and payments to mining contractors, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

MINING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES BY INDUSTRY SUB-DIVISION,
($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75—										
Metallic minerals	11	69,784	51,664	87,781	35,053	361,872	53,984	26,709	..	630,049
Coal	12	200,704		135,155		7,254	(b)	..	..	400,519
Crude petroleum including natural gas	13	..		(b)			..	..	..	
Construction materials	14	25,776	35,723	18,211	4,447	8,055	2,553	717	2,961	96,834
Other non-metallic minerals	15	17,101	5,965	(b)	8,583	7,787	(b)		..	47,300
Total mining, excluding services to mining										
1974–75		**313,366**	**93,352**	**248,880**	**48,082**	**384,968**	**57,276**	**27,426**	**1,352**	**1,174,702**
1973–74		203,280	77,247	168,155	43,893	250,441	62,200	22,041	906	828,164
1972–73		180,214	60,666	141,686	36,041	200,942	31,765	16,430	907	668,651
1971–72		181,356	53,953	117,519	33,922	179,725	29,948	14,669	796	611,888
1970–71		183,509	52,470	83,101	31,894	146,904	21,408	19,989	921	540,195

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Stocks

Statistics on the value of closing stocks are shown in the following table. Figures include stocks of materials, fuels, etc., and mine products and work-in-progress of the establishment whether located at the establishment or elsewhere.

MINING ESTABLISHMENTS: CLOSING STOCKS AT END OF JUNE BY INDUSTRY SUB-DIVISION
($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
					CLOSING STOCKS					
1975										
Metallic minerals	11	44,828	10,646	39,273	17,027	83,693	17,172	17,146	..	212,586
Coal	12	36,872		33,559		2,347	(b)	..	..	90,329
Crude petroleum including natural gas	13	..		(b)			..	..	..	
Construction materials	14	10,415	4,552	3,265	1,213	2,482	419	382	303	23,031
Other non-metallic minerals	15	3,166	1,932	(b)	1,911	5,278	(b)		..	14,487
Total mining, excluding services to mining										
1975		**95,281**	**17,131**	**78,142**	**20,231**	**93,799**	**18,017**	**17,528**	**303**	**340,432**
1974		65,653	15,421	56,849	10,817	65,785	15,570	12,379	111	242,586
1973		69,973	15,888	38,261	9,186	57,461	12,933	7,847	226	211,775
1972		64,444	16,003	38,567	8,156	60,489	14,391	8,897	230	211,178
1971		46,084	13,268	28,357	5,649	45,225	12,502	6,114	167	157,365

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Value added

The following table shows value added, calculated as the value of turnover (sales plus transfers out and other operating revenue) and closing stocks *less* purchases plus transfers in and selected expenses and opening stocks.

MINING ESTABLISHMENTS: VALUE ADDED, BY INDUSTRY SUB-DIVISION
($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75—										
Metallic minerals	11	186,024	422,823	293,650	57,296	580,326	68,569	67,786	..	1,234,887
Coal	12	372,699		343,810		45,475	(b)	..	..	1,206,599
Crude petroleum including natural gas	13	..		(b)			..	..	..	
Construction materials	14	53,188	40,755	26,152	10,857	11,661	2,389	1,420	2,961	149,389
Other non-metallic minerals	15	15,072	4,935	(b)	6,733	16,821	(b)		..	50,195
Total mining, excluding services to mining—										
1974–75		**626,983**	**468,513**	**671,336**	**74,886**	**654,282**	**72,903**	**69,205**	**2,961**	**2,641,069**
1973–74		**384,563**	**389,313**	**503,099**	**67,830**	**493,992**	**85,321**	**70,193**	**1,785**	**1,996,096**
1972–73		**322,291**	**316,619**	**322,103**	**73,822**	**449,553**	**62,186**	**49,084**	**1,644**	**1,597,301**
1971–72		**320,351**	**283,445**	**239,208**	**64,707**	**424,008**	**59,317**	**35,826**	**1,444**	**1,428,307**
1970–71		**290,853**	**217,953**	**245,746**	**65,665**	**386,444**	**58,095**	**22,161**	**1,236**	**1,288,154**

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Fixed capital expenditure

Figures in the following table relate to fixed capital expenditure. Such figures are calculated by deducting disposals of fixed tangible assets from the total outlay on new and second-hand tangible assets.

MINING ESTABLISHMENTS: FIXED CAPITAL EXPENDITURE (OUTLAY ON FIXED TANGIBLE ASSETS LESS DISPOSALS) BY INDUSTRY SUB-DIVISION
($'000)

Industry sub-division	*ASIC code(a)*	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
1974–75—										
Metallic minerals	11	18,335	76,880	67,975	20,789	142,807	18,129	14,700	..	274,993
Coal	12	57,765		39,431		4,740	(b)	..	..	186,972
Crude petroleum including natural gas	13	..		(b)			..	..	..	
Construction materials	14	4,627	6,847	3,005	1,971	1,582	737	(—)32	275	19,177
Other non-metallic minerals	15	2,155	450	(b)	2,335	2.744	(b)		..	15,032
Total mining, excluding services to mining—										
1974–75		**82,882**	**84,177**	**117,774**	**25,094**	**151,872**	**19,430**	**14,668**	**275**	**496,174**
1973–74		**41,975**	**44,013**	**113,007**	**23,327**	**96,862**	**13,159**	**6,155**	**74**	**338,573**
1972–73		**41,566**	**25,920**	**128,696**	**16,062**	**87,785**	**12,482**	**10,341**	**77**	**322,930**
1971–72		**76,963**	**32,335**	**155,810**	**12.082**	**167,174**	**16,532**	**21,672**	**44**	**482,611**
1970–71		**76,994**	**80,389**	**103,454**	**14,665**	**186,643**	**25,967**	**31,837**	**610**	**520,561**

(*a*) Australian Standard Industrial Classification. (*b*) Not available for publication.

Mineral production

This section contains details of the output (quantities and values) of minerals during the year ended June 1975 for all States and Territories and Australia, together with information for Australia for the four preceding years.

Minerals are classified into five major groups, namely metallic minerals, coal, crude petroleum (including natural gas), construction materials and other non-metallic minerals. In the statistics published in this section the minerals are arranged in these five groups.

Mineral production statistics are derived from data collected in the annual mining census (which since 1968–69 has been collected on a June year basis), and in returns to the various State Mines Departments, supplemented in some cases by information made available by the Department of National Resources and by data compiled by the Australian Bureau of Statistics from other sources.

Scope of mineral statistics and relation to mining industry statistics

The statistics of mineral production for the years ended June 1969 and later years apart from the change to a June year basis, are comparable with those for earlier years. Although the integration of the mining census for 1968–69 with other economic censuses conducted in that year (manufacturing, electricity and gas, retail trade, and wholesale trade) was accompanied by major changes in the scope of the mining census and thus in the scope of the mining industry statistics, these changes had little effect on the scope of the mineral production statistics now published. This is because mineral production data were collected, not only from establishments coming within the scope of the mining census as now defined, but also from those establishments classified as non-mining establishments which, as a subsidiary activity, carried out mining or quarrying activities (e.g. brick and cement manufacturing establishments extracting clays, limestone), and from itinerant and part-time miners.

However, as in past years, coverage is deficient in the case of some minerals, principally because of the difficulties in obtaining complete lists of producers and collecting satisfactory returns.

Principles for measuring output of minerals

The quantities of individual minerals produced are recorded, in general, in the form in which the minerals are dispatched from the mine or from associated treatment works in the locality of the mine. Thus, for metallic minerals, the output is recorded as ore if no treatment is undertaken at or near the mine, and as concentrate if ore dressing operations are carried out in associated works in the locality of the mine. In addition to the basic quantity data, the content of metallic minerals (based on assay) are recorded. No allowance has been made for losses in smelting and refining and the quantities shown are therefore, in general, greater than the contents actually recoverable.

The output of individual minerals is valued at the mine or at associated treatment works in the locality of the mine. This valuation is derived, in general, by valuing the quantity produced during the year at the unit selling value (including any subsidy) less any transport costs from the mine or associated treatment works to the point of sale. For some metals, however, special values of output, based on actual or estimated realisations are supplied by certain large mineral producers.

It should be noted that, commencing with the year 1968–69, the output of minerals by enterprises for their own consumption in Australia has been valued on a different basis to that used in previous years. The effect of these changes is that the overall value of coal produced in 1968–69 and later years is somewhat lower and the value of certain other minerals somewhat higher than if the earlier valuation methods had been retained.

Quantity of minerals produced

The following tables show particulars of the quantities of minerals produced during 1974–75 and earlier years *together with details of the aggregate quantity of each metal, metallic oxide or elements contained in the various metallic minerals produced.*

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES CONCENTRATES ETC 1974-75

Mineral		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
METALLIC MINERALS										
Antimony concentrate .	tonnes	1,555	..	..	..	..	..	..	..	1,555
Antimony content .	”	990	..	..	..	..	..	..	..	990
Antimony ore . .	tonnes	(*a*)	(*a*)	..	..	..	..	..	..	(*a*)
Antimony content .	”	7	(*a*)	..	..	..	..	..	..	(*a*)
Bauxite . . .	.’000 tonnes	10	..	10,849	..	7,115	..	4,231	..	22,205
Alumina (Al_2O_3) content . . .	”	4	..	(*a*)	..	(*a*)	..	(*a*)	..	(*a*)
Beryilium ore . .	tonnes	..	..	..	..	6	..	..	..	6
Beryilium oxide (Be O) content . .	m.t.u.	..	..	..	..	72	..	..	..	72
Bismuth concentrate .	tonnes	4	..	..	..	..	..	4,384	..	4,388
Bismuth content .	kg	2	..	..	..	..	..	690,486	..	690,488
Copper content .	tonnes	..	..	..	..	..	..	575	..	575
Gold content .	.’000 grams	..	..	..	..	..	..	974	..	974
Selenium content .	tonnes	..	..	..	..	..	..	..	..	..
Silver content .	.’000 grams	..	..	..	..	..	..	396	..	386
Copper concentrate .	tonnes	38,996	..	663,045	32,683		101,672	57,666	..	894,062
Copper content .	”	9,730	..	166,364	8,931	..	25,824	9,408	..	220,257
Bismuth content .	kg	..	..	..	..	..	..	484,060	..	484,060
Gold content .	.’000 grams	..	..	1,106	50	..	508	858	..	2,522
Lead content . .	tonnes	599	..	..	..	..	..	..	..	599
Silver content	.’000 grams	7,173	..	23,636	1,254	..	5,373	1,564	..	39,000
Zinc content . .	tonnes	1,800	..	..	..	..	..	..	..	1,800
Copper ore. . .	tonnes	174	..	15,162	..	..	..	..	..	15,336
Copper content .	”	27	..	969	..	..	..	..	..	996
Gold content .	.’000 grams	..	..	..	..	..	..	..	..	..
Copper ore for fertilizer	tonnes	..	..	..	1,000	..	..	..	..	1,000
Copper content .	”	..	..	..	8	..	..	..	..	8
Copper oxide . .	tonnes	21	..	..	1,425	..	..	..	..	1,446
Copper content .	”	16	..	..	1,095	..	..	..	..	1,111
Copper precipitate .	tonnes	16	..	24	4	..	..	..	..	44
Copper content .	”	10	..	19	3	..	..	..	..	32
Gold bullion(*b*) .	.’000 grams	11	249	921	..	8,298	2	3,422	..	12,903
Gold content . .	”	11	218	274	..	6,257	2	3,260	..	10,022
Silver content . .	”	1	..	539	..	1,474	..	..	..	2,014
Iron ore . .	.’000 tonnes	..	..	...	5,448	90,659	(*c*)2,052	..	..	98,159
Iron content . .	”	..	292	..	1,853	57,289	1,426	..	..	60,860
Iron oxide(*d*) . .	tonnes	25,328	..	26,569	..	..	10,989	..	..	62,886

For footnotes *see* end of table.

QUANTITY OF MINERALS PRODUCED: AND METALLIC CONTENTS OF ORES CONCENTRATES ETC., 1974-75—*continued*

Mineral		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Lead concentrate	tonnes	330,125	..	271,871	..	18	12,457	741	..	615,212
Lead content	"	247,617	..	134,354	..	10	8,648	219	..	390,848
Antimony content	"	675	..	..	..	..	..	..	..	675
Cadmium content	"	52	..	5	..	..	..	..	..	57
Copper content	"	2,794	..	801	..	..	31	53	..	3,679
Gold content	'000 grams	230	..	..	..	..	30	123	..	383
Silver content	"	244,472	..	306,343	..	..	9,383	193	..	560,391
Sulphur content	tonnes	49,015	..	..	..	..	2,138	..	..	51,153
Zinc content	"	11,582	..	18,244	..	..	1,301	..	..	31,127
Lead-copper concentrate	tonnes	..	..	..	..	..	19,952	..	..	19,952
Lead content	"	..	..	..	..	..	4,207	..	..	4,207
Copper content	"	..	..	..	..	..	2,652	..	..	2,652
Gold content	'000 grams	..	..	..	..	..	913	..	..	913
Silver content	"	..	..	..	..	..	45,211	..	..	45,211
Sulphur content	tonnes	..	..	..	..	..	6,055	..	..	6,055
Zinc content	"	..	..	..	..	..	2,409	..	..	2,409
Lead ore(*e*)	tonnes	142	..	47,400	20	..	..	..	..	47,562
Lead content	"	13	..	2,607	6	..	..	..	..	2,626
Copper content	"	..	..	..	..	..	..	..	..	..
Silver content	'000 grams	..	..	2,939	..	..	..	..	..	2,939
Zinc content	tonnes	..	..	..	..	..	..	..	..	..
Lead zinc middlings	tonnes	10,654	..	..	..	..	..	..	..	10,654
Lead content	"	2,371	..	..	..	..	..	..	..	2,371
Antimony content	"	10	..	..	..	..	..	..	..	10
Cadmium content	"	21	..	..	..	..	..	..	..	21
Copper content	"	128	..	..	..	..	..	..	..	128
Gold content	'000 grams	28	..	..	..	..	..	..	..	28
Silver content	"	16,842	..	..	..	..	..	..	..	16,842
Sulphur content	tonnes	3,036	..	..	..	..	..	..	..	3,036
Zinc content	"	3,359	..	..	..	..	..	..	..	3,359
Manganese ore—										
Metallurgical grade	tonnes	..	..	..	..	..	..	1,409,683	..	1,409,683
Manganese content	"	..	..	..	..	..	..	666,780	..	666,780
Other grades	tonnes	..	..	..	..	..	..	..	..	..
Manganese content	"	..	..	..	..	..	..	..	..	..
Mineral sands(*f*)—										
Ilmenite concentrate (*g*)	tonnes	17,607	..	..	90	873,393	..	..	..	891,090
Titanium dioxide content	"	7,923	..	..	49	495,610	..	..	..	503,582
Leucoxene concentrate	tonnes	..	..	..	..	17,559	..	..	..	17,559
Titanium dioxide content	"	..	..	..	..	15,642	..	..	..	15,642
Monazite concentrate	tonnes	822	..	23	..	2,526	..	..	..	3,371
Monazite content	"	742	..	15	..	2,351	..	..	..	3,108
Rutile concentrate	tonnes	183,096	..	120,959	188	25,118	4,844	..	..	334,205
Titanium dioxide content	"	175,775	..	115,981	180	23,917	4,643	..	..	320,496
Xenotime concentrate	tonnes	..	..	..	..	16	..	..	..	16
Yttrium oxide content	kg	..	..	..	..	4,880	..	..	..	4,880
Zircon concentrate	tonnes	189,854	..	107,570	126	87,641	7,560	..	..	392,751
Zirconium dioxide content	"	187,957	..	71,644	83	57,535	4,972	..	..	322,191
Nickel concentrate	tonnes	..	..	..	..	405,380	..	..	..	405,380
Nickel content	"	..	..	..	..	49,106	..	..	..	49,106
Cobalt content	"	..	..	..	..	79	..	..	..	79
Copper content	"	..	..	..	..	4,449	..	..	..	4,449
Palladium content	kg	..	..	..	..	147	..	..	..	147
Platinum content	"	..	..	..	..	62	..	..	..	62
Nickel ore	tonnes	..	..	1,042	..	..	..	..	..	1,042
Nickel content	"	..	..	(*a*)	..	..	..	..	..	(*a*)
Pyrite concentrate	tonnes	..	..	592	..	..	218,474	..	..	219,066
Sulphur content	"	..	..	278	..	..	103,848	..	..	104,126
Tantalite-columbite concentrate	kg	..	..	..	..	178,700	..	..	..	178,700
Tantalite-columbite content	"	..	..	..	..	53,734	..	..	..	53,734
Tin concentrate	tonnes	3,475	5	2,489	..	982	12,597	4	..	19,552
Tin content	"	1,854	4	1,681	..	690	5,863	3	..	10,095
Tin-copper concentrate	tonnes	..	..	..	..	..	2,506	..	..	2,506
Tin content	"	..	..	..	..	..	73	..	..	73
Copper content	"	..	..	..	..	..	522	..	..	522
Tungsten concentrates—										
Scheelite concentrate	tonnes	..	..	..	..	..	1.672	..	..	1,672
Tungstic oxide content	m.t.u.	..	..	..	..	..	120,700	..	..	120,700
Wolfram concentrate	tonnes	..	..	214	..	..	310	..	..	524
Tungstic oxide content	m.t.u.	..	..	13,862	..	..	23,000	..	..	36,862
Wolfram ore	tonnes	..	..	..	..	..	..	..	..	..
Tungstic oxide content	m.t.u.	..	..	..	..	..	..	..	..	..
Zinc concentrate	tonnes	549,874	..	220,945	..	..	108,793	..	..	879,612
Zinc content	tonnes	285,097	..	114,856	..	..	57,747	..	..	457,700
Cadmium content	"	946	..	442	..	..	135	..	..	1,523
Cobalt content	"	116	..	..	..	..	..	..	..	116
Copper content	"	830	..	..	..	..	351	..	..	1,181
Gold content	'000 grams	54	..	..	..	..	116	..	..	170
Lead content	tonnes	6,000	..	4,655	..	..	5,207	..	..	15,862
Manganese content	"	5,884	..	..	..	..	262	..	..	6,146
Mercury content	kg	..	..	..	..	..	86	..	..	86
Silver content	'000 grams	..	..	28,104	..	..	13,320	..	..	41,424
Sulphur content	tonnes	173,022	..	70,702	..	..	35,191	..	..	278,915
Zinc ore	tonnes	..	..	..	33,493	..	..	..	..	33,493
Zinc content	"	..	..	..	11,779	..	..	..	..	11,779

For footnotes *see* end of table

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES CONCENTRATES ETC., 1974–75—*continued*

Mineral		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
COAL										
Black coal—	'000 tonnes	42,482	..	23,845	1,798	1,879	138	..	..	70,142
Bituminous	"	42,482	..	22,855	..	..	138	..	..	65,475
Sub-bituminous	"	..	..	990	1,798	1,879	..	..	..	4,667
Brown coal (lignite)(*h*)	"	..	24,441	..	..	..	..	..	..	24,441
Brown coal briquettes	"	..	1,092	..	..	..	..	..	..	1,092
PETROLEUM(*i*)										
Crude oil	'000 cu m	..	20,930	71	..	2,095	..	..	..	23,096
Natural gas	mil. cu m	..	2,284	265	1,263	822	..	..	..	4,633
Natural gas condensate(*j*)	cu m	..	..	2,684	..	5,035	..	..	..	7,719
Ethane(*k*)	'000 cu m	..	63,677	..	..	..	..	..	..	63,677
Liquefied petroleum gases(*k*)—										
Propane	'000 cu m	..	1,025	..	..	1	..	..	..	1,026
Butane	'000 cu m	..	1,147	..	..	1	..	..	..	1,148
CONSTRUCTION MATERIALS(*l*)										
Sand	'000 tonnes	9,115	7,541	4,789	2,419	n.a.	219	166	558	(*m*)24,807
Gravel	"	3,814	4,732	5,256	638	n.a.	1,004	1,156	715	(*m*)17,315
Dimension stone	"	12	12	..	43	94	1	..	1	163
Crushed and broken stone	"	13,125	18,382	9,661	8,735	5,396	1,429	367	242	57,337
Other (decomposed rock, etc.)	"	26,112	6,136	764	597	..	56	..	32	33,697
OTHER NON-METALLIC MINERALS										
Asbestos	tonnes	36,558	..	..	..	..	..	..	..	36,558
Barite	"	591	..	..	7,273	4,149	..	..	..	12,013
Carbon dioxide	"	..	..	..	(*a*)	..	..	..	..	(*a*)
Clays—										
Brick and shale	'000 tonnes	2,873	1,970	842	671	1,348	140	..	..	7,844
Other	"	469	301	202	151	114	74	..	..	1,311
Diatomite	tonnes	356	4,979	700	..	..	..	..	..	6,035
Dolomite	"	874	..	10,999	393,469	..	6,199	..	..	411,541
Felspar (including cornish stone)	"	2,021	..	..	1,788	469	..	..	..	4,278
Fluorspar	"	..	..	..	..	..	..	..	..	..
Garnet concentrate	"	..	..	..	..	..	..	..	..	..
Gypsum	"	44,615	54,139	..	784,437	124,471	..	..	..	1,007,662
Limestone (including shell and coral)	'000 tonnes	3,706	2,140	1,876	1,535	1,272	580	..	..	11,109
Lithium ores	tonnes	..	..	..	..	..	..	..	..	..
Lithia (Li_2O) content	m. t. u.	..	..	..	..	..	..	..	..	..
Magnesite, crude	tonnes	18,687	..	..	363	17,223	..	..	..	36,273
Mineral pigments—red ochre	"	..	..	..	..	..	..	..	..	..
Peat(*n*)	"	2,324	..	..	..	670	390	..	..	3,384
Pebbles—for grinding	"	..	..	..	22	..	976	..	..	998
Perlite	"	..	..	3,555	..	..	..	..	..	3,555
Phosphate rock	"	..	..	35,485	1,531	..	..	..	..	37,016
Pyrophyllite	"	14,264	..	..	..	..	..	..	..	14,264
Salt	'000 tonnes	..	114	92	698	(*o*)4,153	..	..	..	5,057
Silica	tonnes	438,761	142,550	671,730	72,571	30,511	32,178	..	..	1,388,301
Sillimanite	"	..	..	..	703	..	..	..	..	703
Talc (including steatite and chlorite)	"	4,254	..	..	15,842	51,976	..	..	..	72,072
Vermiculite	"	..	..	..	..	n.a.	..	..	..	n.a.

(*a*) Not available for publication. (*b*) Includes alluvial gold. (*c*) Iron concentrate. (*d*) For cement manufacture, coal washing. (*e*) Includes silver-lead ore, silver-lead slimes and lead slag. (*f*) Details relating to rutile-zircon concentrates produced in one State and finally separated in another State are included in separated form in the data of the State of origin. The ilmenite figure includes that from which titanium dioxide is not commercially extractable. (*g*) Includes beneficiated Ilmenite. (*h*) In addition 2,900,000 tonnes of brown coal valued at $4,785,000 was used in making briquettes. (*i*) *Source:* Department of National Resources and State Mines Departments. (*j*) Sales—excludes condensate blended with other petroleum products. (*k*) Excludes refinery production. (*l*) Incomplete *see* individual States. (*m*) Incomplete, excludes Western Australia. (*n*) Comprises peat for fertiliser and peat moss. (*o*) Includes langbeinite.

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES CONCENTRATES ETC.: AUSTRALIA

METALLIC MINERALS

Mineral		*1970-71*	*1971-72*	*1972-73*	*1973-74*	*1974-75*
Antimony concentrate	tonnes	887	611	1,440	1,346	1,555
Antimony content	"	424	338	930	860	990
Antimony ore	tonnes	2,934	(*a*)	(*a*)	(*a*)	(*a*)
Antimony content	"	278	(*a*)	(*a*)	(*a*)	(*a*)
Bauxite	'000 tonnes	11,043	13,697	14,702	18,545	22,205
Alumina (Al_2O_3) content	"	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Beryllium ore	tonnes	28	61	118	180	6
Beryllium oxide (BeO) content	mtu	338	678	1,386	2,123	72
Bismuth concentrate	tonnes	1,896	1,281	1,609	2,701	4,388
Bismuth content	kg	232,936	325,474	343,349	444,473	690,488
Copper content	tonnes	110	114	157	400	575
Gold content	'000 grams	1,004	2,239	2,026	956	974
Selenium content	tonnes	..	36	31	5	..
Silver content	'000 grams	175	436	520	274	386
Copper concentrate	tonnes	662,030	636,018	824,772	938,235	894,062
Copper content	"	161,575	159,239	186,763	233,371	220,257
Bismuth content	kg	5,080	22,353	12,100	580,664	484,060
Gold content	'000 grams	2,800	2,985	2,463	3,402	2,522
Lead content	tonnes	777	341	633	754	599
Palladium content	'000 grams	2	..	..	..	..
Platinum content	"	1	..	..	..	..
Silver content	"	35,343	32,342	38,343	40,900	39,000
Zinc content	tonnes	1,850	994	2,058	2,324	1,800
Copper ore	tonnes	30,783	18,890	12,504	23,252	15,336
Copper content	"	1,816	1,261	946	1,407	996
Gold content	'000 grams	1	..	1	..	..
Silver content	"	102	84	..	..	18
Copper ore for fertilizer	tonnes	304	152	3,048	1,516	1,000
Copper content	"	26	7	24	6	8
Copper oxide	tonnes	..	663	976	861	1,446
Copper content	"	..	509	752	663	1,111
Copper precipitate	tonnes	278	247	170	173	44
Copper content	"	179	179	130	128	32
Gold content	'000 grams	3	..	..	..	..
Silver content	"	..	..	..	..	..
Gold bullion (*b*)	'000 grams	18,854	20,762	17,930	13,906	12,903
Gold content	"	14,053	16,179	13,938	10,412	10,022
Silver content	"	4,034	3,769	3,264	2,519	2,014
Gold ore	tonnes	1,087	..	..	116	236
Gold content	'000 grams	3	..	..	1	2
Iron ore (*c*)	'000 tonnes	57,110	62,103	74,645	91,508	98,159
Iron content	"	36,107	39,255	47,204	57,801	60,860
Iron oxide (*d*)	tonnes	64,080	66,908	86,569	71,117	62,886
Lead concentrate	tonnes	631,722	622,592	(*e*)582,178	563,036	615,212
Lead content	"	392,834	395,186	356,695	345,290	390,848
Antimony content	"	662	711	619	574	675
Cadmium content	"	89	83	53	47	57
Copper content	"	3,258	3,603	3,176	2,988	3,679
Gold content	'000 grams	324	382	312	276	383
Silver content	"	588,128	540,465	490,615	497,096	560,391
Sulphur content	tonnes	50,356	56,831	50,826	44,236	51,153
Zinc content	"	32,047	33,922	31,786	29,758	31,127
Lead-copper concentrate	tonnes	10,227	18,025	16,605	19,919	19,952
Lead content	"	3,018	5,126	5,034	5,138	4,207
Copper content	"	1,234	2,133	1,828	2,350	2,652
Gold content	'000 grams	750	1,260	1,038	972	913
Silver content	"	28,824	49,602	49,357	53,034	45,211
Sulphur content	tonnes	2,845	5,005	4,427	5,673	6,055
Zinc content	"	11,278	2,360	2,333	2,657	2,409

For footnotes *see* end of table.

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES, CONCENTRATES, ETC.: AUSTRALIA—*continued*

Mineral		*1970-71*	*1971-72*	*1972-73*	*1973-74*	*1974-75*
METALLIC MINERALS—*continued*						
Lead ore (*f*)	tonnes	36,333	31,284	39,760	32,711	47,562
Lead content	”	2,020	1,774	2,553	1,847	2,613
Copper content	”	..	..	4	..	..
Silver content	’000 grams	2,337	2,044	3,480	2,153	2,939
Zinc content	tonnes	27	18	63	..	..
Lead-zinc middlings	tonnes	23,400	20,055	26,553	11,609	10,654
Lead content	”	6,560	4,910	5,733	2,136	2,371
Antimony content	”	22	26	34	12	10
Cadmium content	”	7	22	29	22	21
Copper content	”	92	133	175	134	128
Gold content	‘000 grams	21	17	23	22	28
Silver content	”	24,660	16,746	23,880	15,643	16,842
Sulphur content	tonnes	1,749	4,309	5,515	3,223	3,036
Zinc content	”	5,109	5,373	8,038	4,011	3,359
Manganese ore—						
Metallurgical grade	tonnes	785,840	1,163,614	1,295,357	1,619,168	1,409,683
Manganese content	”	367,475	554,616	624,042	765,146	666,780
Other grades	tonnes	315	96	16	17	..
Manganese content	”	82	28	4	..	..
Mineral sands (*g*)—						
Ilmenite concentrate	tonnes	886,758	(*h*)705,259	(*h*)720,996	(*h*)676,566	(*h*)891,090
Titanium dioxide content	”	482,382	398,243	396,514	337,363	503,582
Leucoxene concentrate	tonnes	12,863	12,541	10,465	11,374	17,559
Titanium dioxide content	”	11,304	11,112	9,336	10,128	15,642
Monazite concentrate	tonnes	4,146	5,148	4,534	4,052	3,371
Monazite content	”	3,842	4,735	4,148	3,715	3,108
Rutile concentrate	tonnes	374,768	355,675	318,698	308,050	334,205
Titanium dioxide content	”	359,512	343,378	305,962	295,514	320,496
Xenotime concentrate	tonnes	42	14	17	10	16
Yttrium oxide content	kg	9,647	3,658	4,318	4,378	4,880
Zircon concentrate	tonnes	417,974	390,515	373,024	347,014	392,751
Zirconium dioxide content	”	277,877	258,767	247,545	290,519	322,191
Molybdenite concentrate	tonnes	61	18	..	8	..
Molybdenum disulphide content	kg	51,818	15,676	..	7,360	..
Nickel concentrate	tonnes	304,046	299,144	268,349	323,142	405,380
Nickel content	”	34,917	35,559	36,104	42,247	49,106
Cobalt content	”	336	167	203	109	79
Copper content	”	2,938	2,590	2,659	3,407	4,449
Palladium content	kg	28	..	..	71	147
Platinum content	”	..	..	..	17	62
Nickel ore	tonnes	..	..	(*a*)	..	1,042
Nickel content	”	..	..	(*a*)	..	(*a*)
Pyrite concentrate	tonnes	235,355	261,481	198,096	239,274	219,066
Sulphur content	”	110,375	120,586	93,839	114,340	104,126
Gold content	kg	..	..	..	..	..
Silver content	”	..	..	..	..	..
Tantalite-columbite concentrate	kg	158,786	162,019	236,831	231,520	178,700
Tantalite-columbite content	”	63,230	76,217	84,744	91,108	53,734
Tin content	tonnes	(*a*)	..	..	..	..
Tin concentrates	tonnes	15,951	19,722	22,513	20,040	19,552
Tin content	”	8,749	10,912	11,625	10,518	10,095
Copper content	”	..	..	..	6	..
Tantalite-columbite content	kg	(*a*)	..	..	(*a*)	..
Tin-copper concentrate	tonnes	4,367	5,187	4,586	3,241	2,506
Tin content	”	174	157	129	81	73
Copper content	”	836	977	878	652	522

For footnotes *see* end of table

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES, CONCENTRATES, ETC.: AUSTRALIA—*continued*

Mineral		*1970-71*	*1971-72*	*1972-73*	*1973-74*	*1974-75*
METALLIC MINERALS—*continued*						
Tungsten concentrates—						
Scheelite concentrate	tonnes	1,287	1,842	1,789	1,630	1,672
Tungstic oxide content	m.t.u.	90,374	135,347	131,973	117,100	120,700
Wolfram concentrate	tonnes	1,076	841	761	374	524
Tungstic oxide content	m.t.u.	75,681	61,025	55,528	25,676	36,862
Bismuth content	”	..	..	..	..	..
Wolfram ore	tonnes	..	..	122	..	..
Tungstic oxide content	m.t.u.	..	..	100	..	..
Zinc concentrate	tonnes	770,887	867,143	865,248	768,753	879,612
Zinc content	”	403,757	454,874	462,717	405,526	457,700
Cadmium content	”	1,369	1,520	1,547	1,361	1,523
Cobalt content	”	110	116	107	92	116
Copper content	”	900	1,167	1,226	1,156	1,181
Gold content	’000 grams	125	188	201	198	170
Lead content	tonnes	11,223	13,431	14,360	15,266	15,862
Manganese content	”	6,155	7,711	8,443	5,426	6,146
Mercury content	kg	662	483	512	313	86
Silver content	’000 grams	47,574	54,677	61,023	62,717	41,424
Sulphur content	tonnes	239,922	273,583	324,960	241,868	278,915
Zinc ore	tonnes	254	..	..	18,315	33,493
Zinc content	”	76	..	..	3,010	11,779
COAL						
Black coal	’000 tonnes	49,720	53,549	59,755	59,344	70,142
Semi-anthracite	”	1	..	..	..	..
Bituminous	”	46,460	50,340	56,444	55,924	65,475
Sub-bituminous	”	3,259	3,208	3,311	3,420	4,667
Brown coal (lignite)(*i*)	”	19,168	19,998	20,922	23,258	24,441
Brown coal briquettes	”	1,391	1,308	1,228	1,164	1,092
PETROLEUM (*j*)						
Crude oil	’000 cu m	14,937	19,038	20,669	23,096	23,096
Natural gas	mil. cu m	1,961	2,628	3,713	4,360	4,633
Natural gas condensate(*k*)	cu m	1,433	6,125	9,532	8,181	7,719
Ethane(*e*)	’000 cu m	5,380	3,087	27,436	46,176	63,677
Liquefied petroleum gases(*l*)—						
Propane	’000 cu m	347	577	798	1,124	1,026
Butane	’000 cu m	393	662	988	930	1,148
CONSTRUCTION MATERIALS(*m*)						
Sand	’000 tonnes	17,413	19,501	21,869	24,684	24,807
Gravel	”	12,993	12,871	14,520	15,982	17,315
Dimension stone	”	186	410	288	119	163
Crushed and broken stone	”	50,419	50,475	51,037	54,803	57,337
Other	”	28,208	26,405	42,113	33,264	33,697

For footnotes *see* end of table

QUANTITY OF MINERALS PRODUCED AND METALLIC CONTENTS OF ORES, CONCENTRATES, ETC.: AUSTRALIA—*continued*

Mineral		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
OTHER NON-METALLIC MINERALS						
Asbestos	tonnes	751	3,077	32,358	37,651	36,558
Barite	„	54,008	23,750	23,175	6,436	12,013
Carbon dioxide	„	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Clays—						
Brick and shale	'000 tonnes	7,078	7,872	8,098	9,246	7,844
Other(*n*)	„	1,410	1,209	1,321	1,382	1,311
Diatomite	tonnes	2,399	1,758	4,792	8,313	6,035
Dolomite	„	319,656	390,832	402,312	421,471	411,541
Felspar (including cornish stone)	„	3,382	2,948	2,916	3,049	4,278
Fluorspar	„	1,001	380	1,700	874	. .
Garnet concentrate	„	422	525	111	109	. .
Gypsum	„	952,901	1,010,573	961,717	1,192,855	1,007,662
Limestone (including shell and coral)	'000 tonnes	10,447	10,154	10,960	11,312	11,209
Lithium ores(*o*)	tonnes	739	1,930	695	1	. .
Lithia (Li_2O) content	mtu	3,102	8,108	2,828	4	. .
Magnesite, crude	tonnes	19,664	18,684	21,822	20,543	36,273
Mineral pigments—red ochre	„	702	23	625	608	. .
Peat(*p*)	„	3,678	4,489	(*a*)	3,747	3,384
Pebbles—for grinding	„	1,677	1,927	1,509	1,611	998
Perlite	„	1,773	295	1,834	1,739	3,555
Phosphate rock	„	9,164	2,512	1,494	1,484	37,016
Pyrophyllite	„	6,828	6,972	12,718	11,357	14,264
Salt	'000 tonnes	3,774	3,503	3,671	4,683	5,057
Silica	tonnes	955,048	1,012,445	1,168,819	1,385,013	1,388,301
Sillimanite	„	1,139	654	654	719	703
Talc (including steatite and chlorite)	„	44,532	43,997	47,927	63,068	72,072
Vermiculite	„	360	171	636	n.a.	n.a.

(*a*) Not available for publication. (*b*) Includes alluvial gold. (*c*) Includes iron concentrate. (*d*) For cement manufacture, coal washing. (*e*) Excludes Western Australian production. (*f*) Includes silver-lead ore, silver-lead slimes and lead slag. (*g*) Details relating to rutile-zircon concentrates produced in one State and finally seperated in another State are included in separated form in the data of the State of origin. (*h*) Includes Beneficiated Ilmenite. Also includes ilmenite from which titanium dioxide is not commercially extractable. (*i*) Excludes brown coal used for briqette production. (*j*) *Source:* Department of National Resources and State Mines Departments. (*k*) Sales—excludes condensate blended and other petroleum products. (*l*) Excludes refinery production. (*m*) Incomplete *see* individual States. (*n*) Incomplete owing to difficulties of coverage. (*o*) Used mainly for non-metallic purposes. (*p*) Comprises peat for fertiliser and peat moss.

NOTE. Particulars of the production of uranium concentrate are not available for publication.

CONTENTS OF METALLIC MINERALS PRODUCED, 1974-75

Contents of metallic minerals produced		*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Aust.*
Alumina (Al_2O_3)	'000 tonnes	4	..	(*a*)	..	(*a*)	..	(*a*)	(*a*)
Antimony	tonnes	1,682	(*a*)	..	..	..	..	..	(*a*)
Beryllium oxide (BeO)	mtu(*b*)	..	..	..	..	72	..	..	72
Bismuth	kg	2	..	..	..	..	..	1,238,835	1,238,837
Cadmium	tonnes	1,019	..	447	..	..	135	..	1,601
Cobalt	,,	116	..	860	..	79	..	..	1,055
Copper	,,	13,535	..	168,153	10,037	4,449	29,380	10,036	235,590
Gold	'000 grams	335	218	1,380	52	6,292	1,569	5,216	15,061
Iron(*c*)	'000 tonnes	..	..	..	1,853	57,289	1,426	..	60,568
Lead	tonnes	256,587	..	141,616	6	10	(*d*)18,062	219	416,500
Manganese(*e*)	,,	5,884	..	..	..	..	262	666,780	672,926
Manganese dioxide (MnO_2)(*f*)	,,	..	..	..	..	..	..	..	..
Mercury	kg	..	..	..	..	..	86	..	86
Monazite	tonnes	742	..	15	..	2,351	..	..	3,108
Nickel	,,	..	..	..	..	49,106	..	..	49,106
Palladium	kg	..	..	..	..	147	..	..	147
Platinum	kg	..	..	..	..	62	..	..	62
Selenium	kg	..	..	..	..	..	..	..	..
Silver	'000 grams	269,196	..	361,598	1,254	1,614	73,287	2,143	709,092
Sulphur(*g*)	tonnes	225,073	..	70,980	..	..	147,232	..	443,285
Tantalite-columbite ($Ta_2O_5 + Nb_2O_5$)	kg	..	..	..	..	53,734	..	..	53,734
Tin	tonnes	1,854	4	1,681	..	690	5,936	3	10,168
Titanium dioxide (TiO_2)	,,	183,698	..	115,981	229	535,169	4,643	..	839,720
Tungstic oxide (WO_3)	mtu(*b*)	..	..	13,862	..	..	143,700	..	157,562
Yttrium oxide (Y_2O_3)	kg	..	..	..	..	4,880	..	..	4,880
Zinc	tonnes	301,838	..	133,100	11,779	..	61,457	..	508,174
Zirconium dioxide (ZrO_2)	,,	187,957	..	71,644	83	57,535	5,010	..	322,229

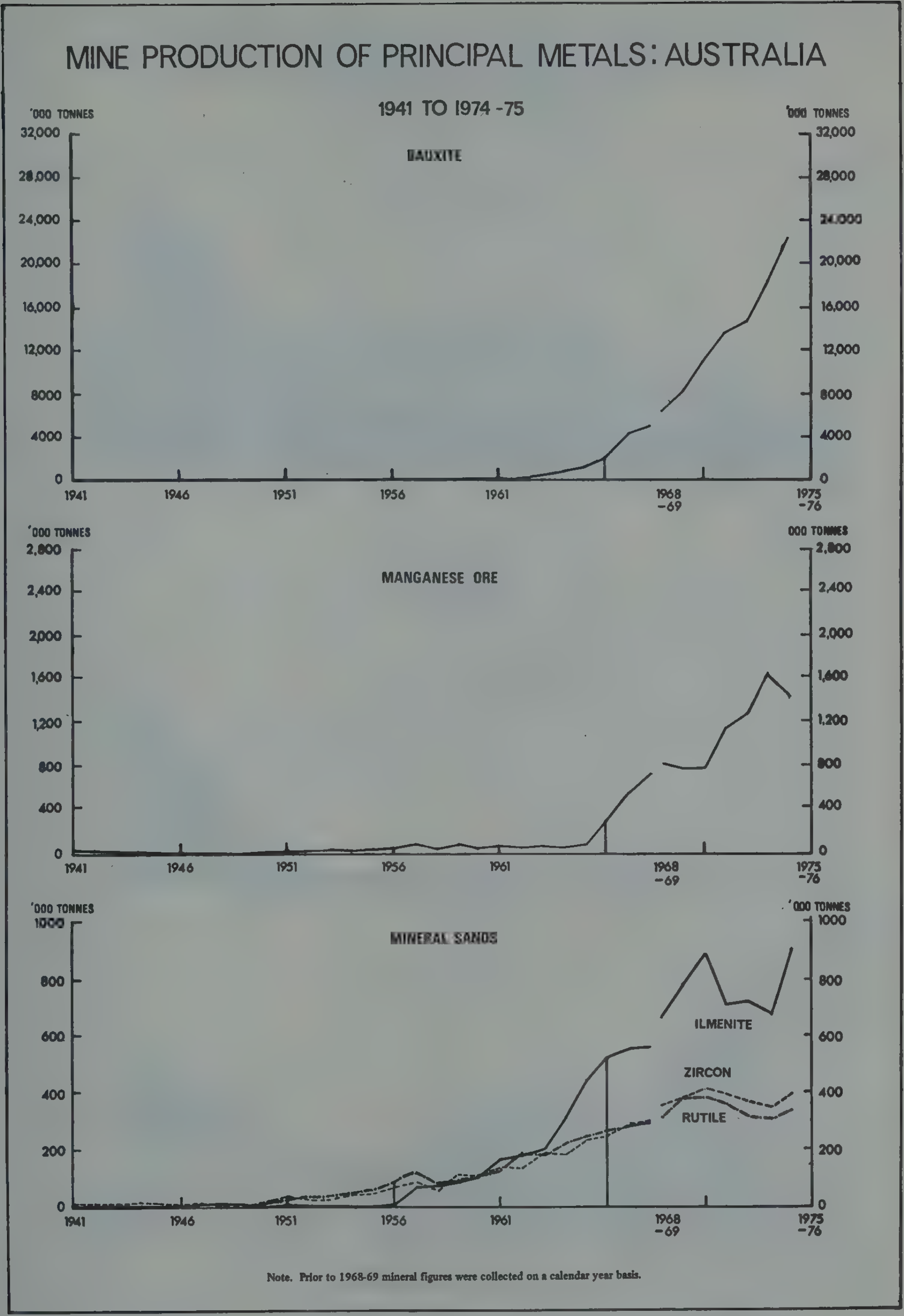
(*a*) Not available for publication. (*b*) Metric ton unit (mtu) equals 10 kilograms. (*c*) Excludes iron content of iron oxide not intended for metal extraction. (*d*) Contained in iron concentrate. (*e*) Content of metallurgical grade manganese ore and zinc concentrate. (*f*) Content of manganese ore of other than metallurgical grade. (*g*) Sulphur content of pyrite and other minerals from which sulphur is recovered.

CONTENTS OF METALLIC MINERALS PRODUCED: AUSTRALIA

Contents of metallic minerals produced		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Alumina (Al_2O_3)	'000 tonnes	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Antimony	tonnes	1,386	1,120	(*a*)	(*a*)	(*a*)
Beryllium oxide (BeO)	mtu(*b*)	338	678	1,386	2,123	72
Bismuth	'000 grams	238,016	347,778	355,449	1,025,137	1,238,837
Cadmium	tonnes	1,465	1,625	1,629	1,430	1,601
Cobalt	,,	446	283	310	201	1,055
Copper	,,	172,965	171,920	198,718	246,669	235,590
Gold	'000 grams	19,103	23,253	20,002	16,271	15,061
Iron(*c*)	'000 tonnes	36,107	39,255	47,204	57,801	60,568
Lead	tonnes	416,432	420,797	385,008	370,431	416,500
Manganese(*d*)	,,	373,630	562,327	632,485	770,572	672,926
Manganese dioxide (MnO_2)(*e*)	,,	82	28	4	..	..
Mercury	kg	662	483	512	313	86
Molybdenum disulphide (MoS_2)	,,	51,818	15,676	..	7,360	..
Monazite	tonnes	3,842	4,735	4,148	3,715	3,108
Nickel	,,	34,917	35,559	36,104	42,247	49,106
Palladium	grams	1,758	..	..	71,000	147,000
Platinum	,,	29,484	..	..	17,000	62,000
Selenium	tonnes	..	36	31	5	..
Silver	'000 grams	731,178	700,165	670,482	674,359	709,092
Sulphur(*f*)	tonnes	405,247	460,313	479,567	409,340	443,285
Tantalite-columbite ($Ta_2O_5 + Nb_2O_5$)	'000 grams	63,799	76,217	84,744	(*a*)	53,734
Tin	tonnes	8,923	11,070	11,754	10,599	10,168
Titanium dioxide (TiO_2)	,,	853,198	752,733	711,812	679,000	839,720
Tungstic oxide (WO_3)	mtu(*b*)	166,061	196,372	187,601	142,776	157,562
Yttrium oxide (Y_2O_3)	'000 grams	9,647	3,658	4,318	4,278	4,880
Zinc	tonnes	444,144	497,541	506,996	441,286	508,174
Zirconium dioxide (ZrO_2)	,,	277,877	258,767	247,545	290,519	322,229

(*a*) Not available for publication. (*b*) Metric ton unit (mtu) equals 10 kilograms. (*c*) Excludes iron content of iron oxide not intended for metal extraction. Includes iron contained in iron concentrate. (*d*) Content of metallurgical grade manganese ore and zinc concentrate. (*e*) Content of manganese ore of other than metallurgical grade. (*f*) Sulphur content of pyrite and other minerals from which sulphur is recovered.

NOTE. Particulars of production of uranium oxide (U_3O_8) are not available for publication.

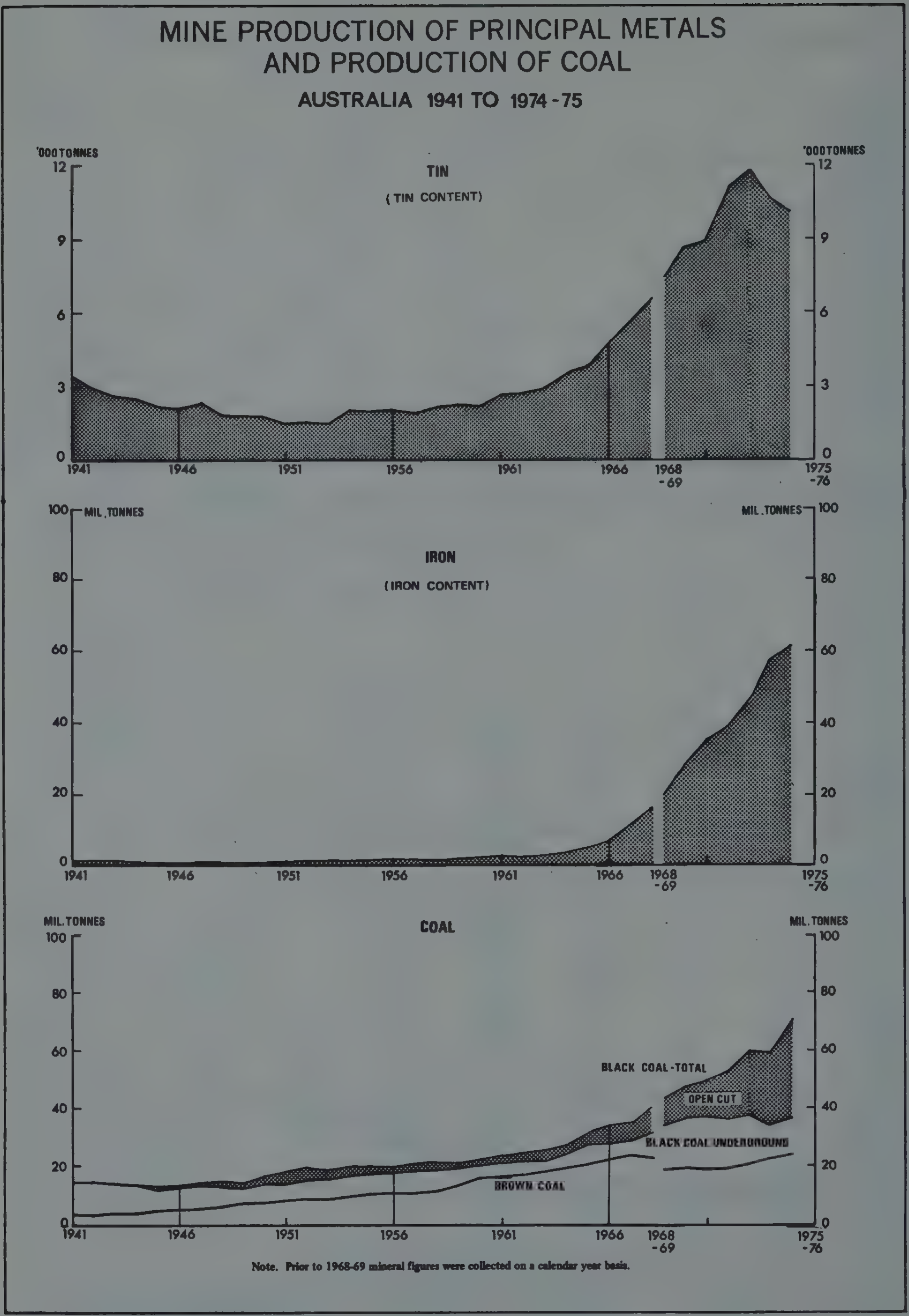


MINE PRODUCTION OF PRINCIPAL METALS: AUSTRALIA

1941 TO 1974-75

Note. Prior to 1968-69 mineral figures were collected on a calendar year basis.

PLATE 58



MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL

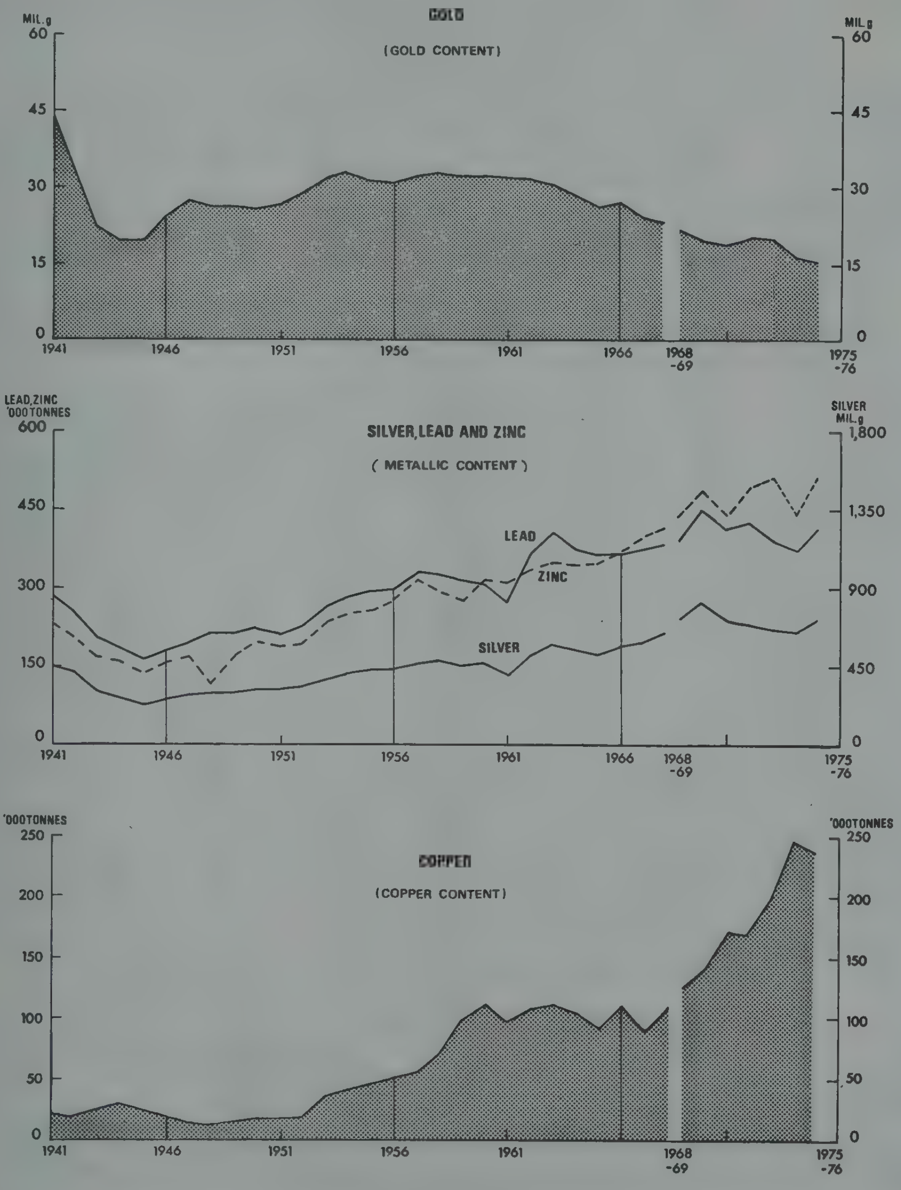
AUSTRALIA 1941 TO 1974-75

Note. Prior to 1968-69 mineral figures were collected on a calendar year basis.

PLATE 59

MINE PRODUCTION OF PRINCIPAL METALS: AUSTRALIA

1941 TO 1974-75



Note. Prior to 1968-69 mineral figures were collected on a calendar year basis.

PLATE 60

Value of minerals produced

The following table shows the value of minerals produced in the past five years.

VALUE OF MINERALS PRODUCED: AUSTRALIA
($'000)

Mineral	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
METALLIC MINERALS					
Antimony—					
Concentrate	422	176	546	932	1,904
Ore	83	(*a*)	(*a*)	(*a*)	(*a*)
Bauxite	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Beryllium ore	9	16	23	23	1
Bismuth concentrate	2,672	5,066	6,813	7,609	14,085
Copper—					
Concentrate	129,752	114,956	154,748	267.873	168,047
Ore(*b*)	(*c*)	947	701	(*a*)	766
Ore for fertiliser	18	6	9	5	3
Oxide	. .	475	757	982	1,406
Precipitate	148	134	101	168	31
Gold—					
Bullion(*c*)	17,779	21,435	25,730	26,839	43,139
Ore	3	. .	. .	3	8
Iron ore	343,682	372,483	395,189	427,518	613,169
Iron oxide	754	773	1,150	(*a*)	855
Lead concentrate	75,825	(*d*)69,340	(*d*)72,060	110,875	124,519
Lead-copper concentrate	3,031	4,444	6,089	8,799	7,609
Lead ore(*e*)	398	321	494	403	579
Lead-zinc middlings	2,269	1,846	2,560	2,002	2,422
Manganese ore	10,852	(*a*)	(*a*)	(*a*)	(*a*)
Mineral sands—					
Ilmenite concentrate	7,434	(*f*)8,071	(*f*)8,155	(*f*)7,953	(*f*)14,270
Leucoxene concentrate	975	1,089	722	1,060	2,079
Monazite concentrate	530	608	551	542	515
Rutile concentrate	37,214	41,023	36,510	36,750	53,669
Xenotime concentrate	54	18	22	7	12
Zircon concentrate	13,207	12,503	11,821	16,726	58,128
Molybdenite concentrate	85	17	. .	6	. .
Nickel concentrate	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Nickel ore	. .	. .	(*a*)	. .	(*a*)
Pyrite concentrate	2,190	2,230	139	238	441
Tantalite-columbite concentrate	936	835	670	777	942
Tin concentrate	25,533	30,406	32,282	43,448	49,138
Tin-copper concentrate	905	659	516	860	390
Tungsten ores and concentrates	9,044	7,979	5,550	5,292	11,385
Zinc concentrate	43,548	63,393	61,820	97,122	138,385
Zinc ore	2	. .	. .	1,551	2,780
Total metallic minerals	*845,423*	*921,642*	*995,366*	*1,281,782*	*1,573,087*
COAL					
Black coal	283,245	330,504	390,980	449,855	874,879
Brown coal (lignite)(*g*)	19,052	21,768	24,716	27,251	40,556
Brown coal briquettes	10,614	11,280	9,173	11,011	11,391
Total coal	*312,911*	*363,553*	*424,869*	*488,116*	*926,827*
PETROLEUM(*h*)					
Petroleum	*216,722*	*271,981*	*311,903*	*378,750*	*446,298*

For footnotes *see* next page.

VALUE OF MINERALS PRODUCED: AUSTRALIA—*continued*

($'000)

Mineral	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
CONSTRUCTION MATERIALS(*i*)					
Construction materials	*144,708*	*159,031*	*170,484*	*196,611*	*238,044*
OTHER NON-METALLIC MINERALS					
Asbestos	170	(*j*)453	3,256	4,140	7,960
Barite	476	202	208	98	303
Carbon dioxide	42	38	47	52	45
Clay—					
Brick clay and shale	7,105	8,408	9,355	11,153	10,241
Other clays	2,648	2,385	2,682	3,880	4,373
Diatomite	20	17	43	70	45
Dolomite	747	844	888	1,087	991
Felspar (including cornish stone)	45	38	35	48	87
Fluorspar	32	22	79	49	. .
Garnet concentrate	6	8	2	2	. .
Gems	17,830	27,262	40,911	47,262	37,032
Gypsum	2,577	2,819	2,826	3,665	3,176
Limestone (including shell and coral)	15,110	15,135	16,932	20,794	24,221
Lithium ores	12	30	11	. .	. .
Magnesite, crude	233	236	318	291	722
Mineral pigments—red ochre	7	. .	10	6	. .
Peat(*k*)	62	87	(*a*)	143	146
Pebbles—for grinding	30	38	36	43	27
Perlite	18	3	18	11	32
Phosphate rock	27	10	6	6	1,190
Pyrophyllite	68	58	112	103	156
Salt	11,563	11,804	12,655	16,410	21,951
Silica	3,276	3,555	4,484	5,353	6,301
Sillimanite	27	17	17	19	22
Talc (including steatite and chlorite)	732	782	(*a*)	1,363	1,348
Vermiculite	2	1	35	(*a*)	(*a*)
Total other non-metallic minerals	*62,866*	*74,253*	*95,943*	*116,062*	*120,381*
TOTAL					
Total, all minerals and construction materials	**1,582,632**	**1,790,460**	**1,998,565**	**2,462,738**	**3,304,637**
Of which—					
New South Wales	392,265	427,306	454,302	503,913	784,097
Victoria	249,422	312,375	349,973	432,379	522,696
Queensland	293,751	318,835	399,192	583,483	802,952
South Australia	92,524	94,169	116,807	116,639	125,966
Western Australia	446,507	510,409	536,414	604,288	860,443
Tasmania	74,169	81,972	84,863	117,589	117,756
Northern Territory	32,274	43,554	54,923	102,114	87,156
Australian Capital Territory	1,719	1,839	2,093	2,333	3,570

(*a*) Not available for publication. (*b*) Includes value of copper slag. (*c*) Includes alluvial gold. (*d*) Excludes value of Western Australian production. (*e*) Includes value of silver-lead ore, silver-lead slimes and lead slag. (*f*) Includes beneficiated ilmenite. (*g*) Excludes value of coal used in making briquettes. (*h*) The values shown are estimates based on prices prescribed in legislation quoted market prices and information from government departments. Includes values for crude oil, natural gas, natural gas condensate, ethane, propane and butane. (*i*) Incomplete owing to difficulties of coverage in some States. (*j*) Excludes Western Australian production. (*k*) Comprises peat for fertiliser and peat moss.

Foreign ownership and control of the mining industry in Australia

Summary information on foreign ownership and control of mining industry in Australia is shown in Chapter 11. More detailed Statistics are available in *Foreign Ownership and Control of the Mining Industry* (*Advance Release*) (10.73) and *Foreign Ownership and Control of the Mining Industry* (10.42).

Mineral exploration (other than for petroleum)

Definition

Exploration consists of the search for and/or appraisal of new ore occurrences and known deposits of minerals (including extensions to deposits being worked) by geological, geophysical, geochemical and other methods (including drilling). Exploration for water is excluded. The construction of shafts and adits is included if primarily for exploration purposes. Excluded are mine development activities carried out primarily for the purpose of commencing or extending mining or quarrying operations (including the construction of drives, shafts, winzes, etc., in underground mines, and the preparation of quarrying sites, including overburden removal, for open-cut extraction).

Sources of statistics

The statistics of exploration for minerals *other than petroleum* are derived from the annual mineral exploration census, which is carried out by the Australian Bureau of Statistics in each State and the Northern Territory, except in New South Wales where the census is conducted jointly with the State Mines Department.

Classification

The data obtained in the mineral exploration census are divided into the following categories:

(*a*) *Private exploration on production leases*—relates to exploration carried out on the production lease by privately operated mines currently producing or under development for the production of minerals.

(*b*) *Other private exploration*—relates to exploration carried out by private enterprises on areas covered by exploration licences, authorities to enter, authorities to prospect and similar licences and authorities issued by State governments' for exploration of minerals. Also included is exploration by private enterprises which is not directly connected with areas under lease, licence, etc.

(*c*) *Exploration by government*—relates to exploration of minerals carried out by:

(i) State Mines Departments and business undertakings operated by State and local government authorities.

(ii) Commonwealth Government (Bureau of Mineral Resources, Geology and Geophysics, The Joint Coal Board, The Atomic Energy Commission, The Petroleum and Mineral Authority and The Mines Branch of the Department of the Northern Territory).

Expenditure, metres drilled, etc., States and Northern Territory

The following tables show expenditure and metres drilled, etc., on mineral exploration other other than for petroleum during the last five years.

MINERAL EXPLORATION (OTHER THAN FOR PETROLEUM)

EXPENDITURE
($'000)

	1970–71	1971–72	1972–73	1973–74	1974–75
PRIVATE EXPLORATION					
New South Wales	21,238	15,093	12,673	11,544	11,866
Victoria	1,853	1,258	1,939	2,524	2,046
Queensland	32,662	22,119	15,465	15,395	21,654
South Australia	6,220	4,057	5,263	4,485	4,951
Western Australia	86,082	62,823	51,121	54,056	57,143
Tasmania	4,397	3,478	3,392	4,194	5,565
Northern Territory	8,610	8,233	9,885	9,429	6,603
Total	*161,063*	*117,061*	*99,738*	*101,628*	*109,827*
GOVERNMENT EXPLORATION(*a*)					
Commonwealth Government	3,928	4,603	5,061	5,292	5,474
State Mines Departments	3,386	3,732	4,341	5,619	7,112
Total	*7,314*	*8,334*	*9,402*	*10,911*	*12,586*
TOTAL EXPENDITURE					
On drilling	45,106	32,905	29,073	28,824	36,172
Other	123,272	92,490	80,067	83,714	86,242
Australia	**168,377**	**125,396**	**109,140**	**112,539**	**122,413**

METRES DRILLED
('000 metres)

	1970–71	1971–72	1972–73	1973–74	1974–75
PRIVATE EXPLORATION					
New South Wales	473	360	291	333	289
Victoria	29	17	21	39	40
Queensland	821	567	602	360	441
South Australia	195	123	343	207	199
Western Australia	1,955	1,996	1,393	1,255	1,266
Tasmania	73	60	60	96	80
Northern Territory	128	113	171	112	86
Total	*3,674*	*3,235*	*2,880*	*2,403*	*2,401*
GOVERNMENT EXPLORATION(*a*)					
Commonwealth	3	2	..	19	11
State Mines Departments	84	71	70	89	97
Total	*86*	*73*	*70*	*108*	*108*
TOTAL METRES DRILLED					
Drilled—core	949	794	769	657	733
non-core	2,811	2,514	2,181	1,854	1,775
Australia	**3,760**	**3,308**	**2,949**	**2,511**	**2,509**

(*a*) Statistics for 1973–74 and 1974–75 are not comparable in some respects with those for previous years; for details *see* the bulletin *Mineral Exploration* 1974–75 (10.41).

Petroleum exploration

Source of statistics

These statistics were collected and compiled by the Bureau of Mineral Resources, Geology and Geophysics, Canberra. Statistical and other information relating to petroleum exploration is published by the Bureau of Mineral Resources in *The Petroleum Newsletter* (issued quarterly) and *The Australian Mineral Industry—Annual Review.*

Scope

Petroleum exploration consists of the search for, and/or appraisal of, deposits of crude oil and/or natural gas and natural gas liquids by geological, geophysical, geochemical, and other exploration methods, including drilling. Included in the expenditure are the costs of drilling exploratory oil and/or gas wells and the testing of such wells. Also included are the cost of access roads, site construction, permits, licences and similar fees, relevant office buildings and furniture, transportation equipment, storage facilities, plant and equipment, and review work, where these are undertaken primarily for purposes of exploration for deposits of petroleum. Details of developmental oil and/or gas wells are excluded.

Operations

The following tables show particulars of expenditure, and wells and metres drilled in petroleum exploration in recent years.

EXPENDITURE ON PETROLEUM EXPLORATION BY PRIVATE ENTERPRISE AND BY GOVERNMENTS: AUSTRALIA
($'000)

	1970	*1971*	*1972*	*1973*	*1974*
PRIVATE SOURCES(*a*)					
Utilised in—					
New South Wales	2,597	287	200	494	170
Victoria	11,538	1,453	15,076	15,206	10,613
Queensland	5,474	3,011	3,085	2,546	2,860
South Australia	6,431	7,084	9,804	1,871	2,205
Western Australia	29,557	41,872	57,903	52,364	45,281
Tasmania	4,708	1,939	991	60	110
Northern Territory	13,753	17,250	10,350	13,095	23,047
Total	*74,059*	*72,896*	*97,408*	*85,636*	*84,286*
GOVERNMENT SOURCES					
Payments under *Petroleum Search Subsidy Act* 1959—					
Utilised in—					
New South Wales	406	225	64	22	130
Victoria	732	231	570	546	624
Queensland	1,623	500	367	825	823
South Australia	923	537	611	414	187
Western Australia	4,604	3,590	4,209	5,230	2,642
Tasmania	395	208	16	59	569
Northern Territory	1,061	695	380	508	273
Total subsidy payments	*9,744*	*5,986*	*6,218*	*7,604*	*5,248*
Utilised for—					
Geophysical	2,924	2,470	3,230	3,267	1,779
Drilling	6,820	3,517	2,987	4,337	3,469
Other Government sources—					
Commonwealth Government(*a*)	3,216	3,913	3,984	4,178	3,457
State Government	456	458	564	702	1,011
Total other Government sources	*3,672*	*4,371*	*4,548*	*4,880*	*4,468*
Total Government sources	*13,416*	*10,357*	*10,766*	*12,484*	*9,716*
TOTAL FUNDS, PRIVATE AND GOVERNMENT					
Grand total	**87,475**	**83,254**	**108,174**	**98,120**	**94,002**

(*a*) Excludes payments under the *Petroleum Search Subsidy Act* 1959.

SUMMARY OF EXPLORATION WELLS AND METRES DRILLED IN PETROLEUM EXPLORATION, 1974

		N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*Total*
Wells—									
Drilled (i.e. those which reached final depth)—									
As oil producers . .	No.	..	..	..	..	..	..	1	1
As gas producers . .	No.	1	..	1	..	1	..	1	4
As oil and gas producers .	No.	..	2	..	..	1	..		3
Plugged and abandoned .	No.	1	3	8	1	19	4	7	43
Total	**No.**	**2**	**5**	**9**	**1**	**21**	**4**	**9**	**51**
Average final depth of wells drilled	m	890	2,861	2,157	2,436	2,365	2,379	3,161	2,321
Drilling still in progress at 31 December (uncompleted holes)	No.	..	..	..	..	..	..	2	2
Wells drilled or drilling over 3,000 metres . . .	No.	..	1	1	..	8	1	5	16
Metres drilled—									
Completed wells	m	1,130	14,303	17,457	2,436	46,203	9,516	27,211	118,256
Uncompleted holes . .	m	..	..	..	..	..	..	3,028	3,028
Total	**m**	**1,130**	**14,303**	**17,457**	**2,436**	**46,203**	**9,516**	**30,239**	**121,284**

SUMMARY OF EXPLORATION WELLS AND METRES DRILLED IN PETROLEUM EXPLORATION: AUSTRALIA

		1970	*1971*	*1972*	*1973*	*1974*
Wells—						
Drilled (i.e. those which reached final depth)—						
As oil producers	No.	2	1	3	1	1
As gas producers	No.	15	12	17	8	4
As oil and gas producers(*a*) . . .	No.	..	..	..	2	3
Plugged and abandoned	No.	108	62	82	49	43
Total	**No.**	**125**	**75**	**102**	**60**	**51**
Average final depth of wells drilled . .	m	1,634	2,274	2,213	2,441	2,321
Drilling still in progress at 31 December (uncompleted holes)	No.	8	8	9	7	2
Wells drilled or drilling over 3,000 metres .	No.	19	23	20	22	16
Metres drilled—						
Completed wells	m	192,552	153,344	204,836	127,978	118,256
Uncompleted holes	m	16,066	15,199	19,595	12,860	3,028
Total	**m**	**208,618**	**168,543**	**224,431**	**140,838**	**121,284**

(*a*) This breakdown not available prior to 1973.

Mineral processing and treatment

The extraction of minerals from ore deposits, as in mining and quarrying, is only part of the wider field of mineral technology. It is only in rare instances that minerals can be used directly in the form in which they are produced by mines, and, much more commonly, minerals must undergo considerable processing and treatment before their full utility and value can be realised. Examples of this processing and treatment are the smelting and refining of metals, the production of coke from coal, the refining of oil, and the treatment of non-metallic minerals as in the production of superphosphate and other chemicals and building materials like bricks and cement. The sectors of the economy which carry out this work are classified for statistical purposes to the manufacturing industry, and particulars relating to those activities which principally involve mineral processing and treatment—i.e. the treatment of non-metalliferous mine and quarry products, the manufacture of mineral oils and chemical fertilisers, the smelting, converting, refining and rolling of iron and steel, the extracting and refining of other metals, and the manufacture of alloys are given in Chapter 21, Manufacturing Industry.

Principal products

The following table shows particulars of the production of certain important manufactured products of mineral origin during recent years.

PRODUCTION OF PRINCIPAL MANUFACTURED PRODUCTS OF MINERAL ORIGIN: AUSTRALIA

Commodity		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
			METALS(*a*)			
Non-ferrous—						
Alumina	tonnes	2,404,651	2,825,588	3,526,898	4,516,376	5,073,280
Refined aluminium	,,	218,244	212,461	207,531	208,756	222,876
Blister copper(*b*)	,,	130,199	144,791	149,512	184,952	189,257
Refined copper	,,	115,321	130,827	136,792	149,300	178,451
Lead bullion (for export)(*b*)	,,	179,424	141,582	138,798	149,257	149,876
Refined lead	,,	154,937	190,638	173,561	201,022	170,508
Refined zinc	,,	253,761	274,245	302,536	281,586	243,209
Refined tin	,,	5,942	6,391	7,301	6,509	5,973
Ferrous—						
Pig iron(*c*)	'000 tonnes	6,240	6,006	7,021	7,444	7,591
Steel ingots(*c*)	,,	6,800	6,480	7,209	7,504	8,017
Precious—						
Refined gold(*d*)	'000 grams	14,426	16,394	14,689	11,106	10,744
Refined silver	,,	253,852	273,142	247,933	259,221	272,855
			FUELS			
Coal products—						
Metallurgical coke	'000 tonnes	4,542	4,136	4,926	4,921	5,497
Brown coal briquettes	,,	1,398	1,308	1,221	1,164	1,092
Petroleum products—						
Motor spirit	mil. litres	10,138	10,609	11,157	12,200	12,508
Furnace fuel	'000 tonnes	5,791	5,015	5,042	5,265	4,656
Automotive distillate	,,	3,177	3,426	3,707	4,265	4,682
Industrial diesel fuel	,,	1,120	1,112	1,055	1,276	1,110
			BUILDING MATERIALS			
Clay bricks	millions	1,669	1,744	1,881	2,050	1,713
Portland cement	'000 tonnes	4,685	4,884	5,097	5,412	5,086
Plaster of paris	,,	309	315	342	361	336
Plaster sheets	'000 sq m	34,365	34,315	39,151	44,105	42,008
			CHEMICALS			
Sulphuric acid	'000 tonnes	1,612	1,756	2,266	2,434	1,770
Caustic soda	tonnes	119,678	127,857	123,219	140,578	139,206
Superphosphate(*e*)	'000 tonnes	3,115	3,508	4,962	5,288	3,309

(*a*) Excludes secondary metal with the exception of pig iron and steel ingots. (*b*) Metallic content. (*c*) Year ended 31 May. (*d*) Newly-won gold of Australian origin. (*e*) Includes double and triple superphosphate and ammonium phosphate expressed in terms of single superphosphate i.e. 22% P_2O_5 equivalent.

Overseas trade

Exports and imports

Data of imports and exports of minerals and mineral products have been extracted from the official trade statistics compiled in the Australian Bureau of Statistics. Particulars of the quantities and values ($f.o.b. port of shipment) of the principal minerals and mineral products exported from and imported into Australia during recent years are shown in the following table.

EXPORTS AND IMPORTS OF PRINCIPAL MINERALS AND MINERAL PRODUCTS AUSTRALIA

Commodity(a)		*Quantity*			*Value ($'000 f.o.b.)*		
		1972–73	*1973–74*	*1974–75*	*1972–73*	*1973–74*	*1974–75*
EXPORTS(*b*)							
Non-ferrous—							
Copper—							
Concentrate	tonnes	164,451	175,510	146,744	32,267	57,755	44,145
Blister	„	7,728	10,426	15,196	9,896	21,856	20,853
Refined	„	49,967	50,678	93,862	44,729	76,850	93,800
Matte, slags, etc.	„	9,829	8,392	23,496	2,640	2,440	3,859
Lead—							
Concentrate	„	74,145	77,678	42,192	12,441	19,445	13,223
Bullion	„	142,270	147,820	152,754	44,940	73,059	82,264
Refined	„	149,691	134,231	124,766	36,400	43,671	47,435
Slags and residues	„	6,628	44,825	25,406	1,064	2,644	2,261
Zinc—							
Concentrate	„	289,836	426,272	398,622	21,508	45,560	58,311
Refined	„	203,777	164,404	140,429	61,979	69,331	78,526
Slags and residues	„	5,011	6,758	5,454	617	1,647	1,799
Tin—							
Concentrate	„	11,290	7,982	13,700	11,739	13,530	25,625
Refined	„	3,939	2,409	2,394	12,026	7,641	11,044
Aluminium—							
Alumina	'000 tonnes	2,966	3,951	4,472	155,453	196,078	297,873
Refined	tonnes	81,344	45,834	64,064	30,767	20,727	37,536
Ferrous and alloy—							
Iron ore—							
Pellets	'000 tonnes	7,987	9,519	7,747	76,494	89,905	101,747
Fines	„	25,178	31,874	36,196	126,313	154,078	237,477
Lump	„	33,171	36,871	41,404	236,285	248,098	365,783
Tungsten—							
Scheelite concentrate	tonnes	1,553	1,658	1,924	3,019	3,419	8,686
Wolfram concentrate	„	818	382	469	1,734	792	2,106
Pig iron	„	687,124	957,805	558,507	27,286	60,081	62,012
Steel ingots, blooms	„	743,169	747,572	1,132,954	48,377	64,059	149,322
Mineral sands—							
Ilmenite concentrate	„	521,823	710,570	628,459	5,731	8,136	7,658
Rutile concentrate	„	338,760	359,043	338,087	39,750	45,324	56,780
Zircon concentrate	„	419,962	401,545	388,926	15,131	18,616	56,972
Precious—							
Gold, refined	'000 grams	10,136	4,344	2,940	18,239	13,660	10,973
Silver, refined	„	181,014	112,894	143,301	8,731	8,212	14,119
Coal, black	'000 tonnes	25,751	27,755	32,652	290,703	347,992	660,511
Crude oil(*c*)	'000 cu m	330	288	234	4,910	8,520	14,388
IMPORTS							
Tin, refined	tonnes	65	67	26	203	337	140
Nickel (pigs, anodes, etc.)	„	1,060	2,687	1,050	2,677	5,474	3,410
Ferro-alloys	„	27,203	46,335	43,287	7,801	12,570	21,210
Gold—							
Unrefined bullion(*d*)	'000 grams	3,091	2,697	2,809	5,205	7,265	8,744
Refined	„	160	7	24	233	21	108
Crude oil(*e*)	'000 cu m	9,316	10,139	9,552	99,384	244,062	475,080
Asbestos	tonnes	62,905	56,839	51,194	9,909	8,216	11,195
Diamonds—							
Industrial	metric carats	807,960	1,084,883	928,558	3,099	3,717	3,420
Gemstone	„	59,416	90,196	69,091	9,346	14,734	14,307
Phosphate rock	'000 tonnes	2,282	3,104	2,639	22,647	35,232	74,059
Potassium fertilisers	tonnes	165,412	190,596	211,108	4,701	5,220	9,523
Sulphur	„	498,275	608,010	925,747	6,660	8,329	14,899

(*a*) In addition to the commodities listed, significant quantities of bauxite and nickel ores and concentrates are exported but details are not available for publication. (*b*) Quantities shown for metallic minerals are gross quantities, not metallic contents. (*c*) Includes also partly refined oil, topped crudes and enriched crudes. (*d*) Gold content. (*e*) Includes also partly refined oil, topped crudes, enriched crudes and refinery feed stock.

Considerable quantities of metallic ores, concentrates, slags, and residues are exported from Australia for refining overseas. The following table shows selected items exported during 1974–75 and their principal metallic content as estimated by assay.

PRINCIPAL METALLIC CONTENTS OF SELECTED ORES AND CONCENTRATES ETC., EXPORTED FROM AUSTRALIA, 1974-75

	Metallic contents—estimated from assay							
Ores and concentrates, etc.	*Copper*	*Lead*	*Zinc*	*Tin*	*Iron*	*Tungstic oxides*	*Gold*	*Silver*
	tonnes	tonnes	tonnes	tonnes	'000 tonnes	tonnes	'000 grams	'000 grams
Copper concentrate	38,895	46	..	..	..	..	2,722	6,226
Blister copper	14,895	..	..	..	..	..	1,889	3,036
Copper matte, slags, etc.(*a*)	3,630	5,637	..	..	..	..	614	9,199
Lead concentrate	2,417	20,311	6,791	..	..	..	1,960	73,780
Lead bullion	5	151,297	..	..	..	..	..	302,972
Lead slags and residues	796	7,545	61	79	..	..	89	15,001
Zinc concentrate	..	1,747	231,664	..	..	..	..	41,342
Zinc slags and residues	..	..	4,399	..	..	..	..	..
Tin concentrate	..	..	..	5,414	..	..	..	..
Iron ore—								
Pellets	..	..	..	..	4,808	..	..	..
Fines	..	..	..	..	22,254	..	..	..
Lump	..	..	..	..	26,591	..	..	..
Scheelite concentrate	..	..	..	..	..	1,319	..	..
Wolfram concentrate	..	..	..	..	..	384	..	..
Total metallic content	**60,638**	**186,583**	**242,915**	**5,493**	**53,653**	**1,703**	**7,274**	**451,556**

(*a*) Includes copper matte, copper slags and residues and copper-lead dross and speiss.

Prices

The following table shows average prices of some principal refined metals and ores and concentrates on Australian and certain major overseas markets. Prices of minerals such as iron ore, coal and bauxite are not shown, as these minerals are commonly sold on a contract basis rather than on an open market basis.

AVERAGE DAILY PRICES OF SELECTED METALS AND METALLIC ORES AND CONCENTRATES: AUSTRALIAN AND OVERSEAS MARKETS

(*Source:* Bureau of Mineral Resources, Geology and Geophysics)

METALS(*a*)

	Tin			*Nickel U.S.A.*	*Aluminium*		*Gold*		*Silver*	
Period	*Aust. ($A—tonne)*	*L.M.E. (£Stg—metric ton)*	*Straits ($Mal-picul)*	*($U.S.—lb)*	*Aust. ($A—tonne)*	*U.S.A. (USc—lb)*	*Premium markets ($A—f. oz) Australia and Overseas*	*U.K. ($US—f. oz)*	*Aust. ($A—kg)*	*U.K. (Stg new pence—f. oz)*
1972–73	(*b*)3,291.2	1,630.5	627.7	(*c*)1,371.8	(*b*)578.0	24.3	58.40	77.92	(*d*)156.6	83.6
1973–74	4,774.1	2,882.8	957.0	1.59	585.0	28.2	88.47	130.76	82.5	162.8
1974–75	5,715.8	3,246.7	1,022.3	1.93	671.0	38.1	121.54	167.76	104.9	187.9
1974–75—										
Highest	6,991.0	4,195.0	1,310.0	2.01	707.0	39.0	132.02	195.25	119.8	220.8
Lowest	5,262.0	2,925.0	910.0	1.85	591.0	33.5	92.63	131.50	89.3	158.7

	Copper		*Lead*			*Zinc*			
Period	*Aust. ($A—tonne)*	*L.M.E. (£Stg—metric ton)*	*Aust. ($A—tonne)*	*L.M.E. (£Stg—metric ton)*	*U.S.A. (USc—lb)*	*Aust. ($A—tonne)*	*L.M.E. (£Stg—metric ton)*	*Prod. (£Stg—ton)*	*U.S.A (USc—lb*
1972–73	990.3	508.6	(*b*)250.0	137.8	15.63	(*b*)355.5	177.2	174.3	19.41
1973–74	1,428.8	980.7	358.4	237.4	18.48	454.2	582.0	282.4	27.45
1974–75	1,050.5	598.3	366.6	216.5	23.95	612.8	359.1	353.6	38.55
1974–75—									
Highest	1,480.0	852.5	380.0	246.0	24.50	640.0	501.0	360.0	40.00
Lowest	900.0	497.8	290.0	143.0	19.00	519.0	300.5	330.0	34.50

For footnotes *see* next page

AVERAGE DAILY PRICES OF SELECTED METALS AND METALLIC ORES AND CONCENTRATES: AUSTRALIAN AND OVERSEAS MARKETS—*continued*

ORES AND CONCENTRATES

			Ilmenite		*Rutile*		*Zircon*	
Period	*Tin Aust. ($A—mtu)*	*Wolfram U.K. (£Stg—mtu)*	*Aust. ($A—ton)*	*Europe (£Stg—metric ton)*	*Aust. ($A—ton)*	*Europe (£Stg—metric ton)*	*Aust. ($A—ton)*	*Europe (£Stg—metric ton)*
1972–73 .	27.93	14.00–19.15	10.5–12.0	9.35–11.32	115–125	64.00–87.00	35–39	26.82–38.00
1973–74 .	42.43	15.70–45.50	10.5–12.0	9.35–11.32	125–130	127.00–240.00	45–50	45.00–240.00
1974–75 .	48.58	37.00–50.25	11.0–12.0	13.00–18.00	(*e*)	200.00–330.00	(*e*)	170.00–330.00
1974–75—								
Highest .	52.88	50.25	12.0	18.00	(*e*)	330.00	(*e*)	330.00
Lowest .	46.06	37.00	11.0	13.00	(*e*)	200.00	(*e*)	170.00

(*a*) Where a daily price does not actually exist for a commodity, daily prices have been imputed from price data which are available. (*b*) $ per ton. (*c*) $ Stg per metric ton. (*d*) Ac per f.oz. (*e*) No price quoted.

Details on monthly prices, and price specifications relating to each commodity in the table are contained in each issue of the bulletin, *Minerals and Mineral Products* (10.19).

REVIEW OF RECENT DEVELOPMENTS IN THE AUSTRALIAN MINERAL INDUSTRY

Major developments in the Australian mineral industry, particularly during the last year, are reviewed briefly in subsequent parts of this section. Additional information on developments in the industry is available in *Australian Mineral Industry 1973 Review* published by the Bureau of Mineral Resources, Geology and Geophysics. That publication contains comprehensive reviews of mineral commodities of importance to the Australian economy, as well as a general review of the industry's performance during the year.

General Review of 1974

The worldwide resurgence of demand for mineral commodities, which was observed in 1973 and attributed to accumulation of consumer stocks ahead of inflation, was followed in 1974 by a period of recession in the mining industry. The major factor contributing to the recession was continuing inflation of costs both in the mining industry and in the consumer industries. Manufacturers faced with liquidity problems reduced mineral inventories, and stocks held by producers and in terminal markets rose to record levels.

However, with the exception of iron and steel, the Australian mineral industry continued to expand in 1974, and at a considerably faster rate than in the two preceding years. The annual rate of growth in the value of mineral output was about 24 per cent compared with 18 per cent in 1973 and 13 per cent in 1972 although the index of mineral output at constant prices indicated slower growth rates for these years (5, 16 and 8 per cent respectively). The increased rate of growth in 1974 resulted mainly from buoyant overseas markets in the first half of the year, and, despite falling demand for many metals in the second half of the year, continuing strong demand for coal and mineral sands. Devaluation of the $A in September 1974 also contributed to the higher growth rate.

The ex-mine value of minerals produced in 1974 was a record $2,732 million, exceeding the previous record, in 1973, by $528 million or 24 per cent. The increase was largely the result of increased production of black coal, iron ore, copper ores and concentrates, construction materials, lead and zinc ores and concentrates, and nickel ores and concentrates, and record prices for many minerals on world markets.

The index of mineral output at constant prices indicated an increase in the quantum of production of 5 per cent. Value added by the mining industry (i.e. excluding smelting and refining) in 1973–74 was $1,985 million compared with $1,597 million in the previous fiscal year, an increase of 24 per cent.

Mines and quarries (except gold) became the largest single export-earning group in 1969–70 but in 1974–75 was exceeded slightly (by 0.1 per cent) by 'Agriculture' which more than doubled its earnings largely because of high world prices for sugar and cereal grains. However 'Mines and quarries' accounted for a record 26.9 per cent of total exports although this was achieved partly at the expense of 'Wool' and 'Other pastoral' exports whose combined relative contribution fell from 32.8 per cent in 1973–74 to 16.5 per cent in 1974–75.

The import bill for mineral primary products in 1974 rose dramatically by 169 per cent from $215 million to $580 million; this was primarily because of a fourfold increase in the value of crude oil imports which rose from $114 million (53 per cent of total imports) in 1973 to $420 million (72 per cent) in 1974. In 1974, imports of mineral primary products accounted for 7.5 per cent of the total value of merchandise imports, compared with 4.5 per cent in 1973.

Despite the increase in the value of mineral imports the surplus in the balance of trade in minerals (excluding gold) increased by 24 per cent from $1,475 million in 1973 to $1,826 million in 1974.

Results of the 1973–74 economic census show that value added by the mining industry (Australian Standard Industrial Classification sub-divisions 11–15 incl.), was $1,985 million. Value added by smelting and refining (ASIC classes 1911, 1912 and 2921 to 2926 inclusive of the Manufacturing Industries division) was $968 million for the same period.

Bauxite

The history of the aluminium industry and recent significant developments in the industry were reviewed in previous issues of the Year Book (No. 51, page 1168 and No. 52, page 1048).

In 1974 bauxite production capacity at Weipa, Queensland, increased to 10.5 million tonnes per annum following completion of a further stage in the development of the mine and associated township, and of ore treatment and loading facilities. Approximately 4 million tonnes from Weipa were used by the Gladstone, Queensland, alumina refinery in 1974; the remaining production is available for export.

A firm decision has not yet been made to proceed with the bauxite/alumina projects in Western Australia to mine bauxite from the Mount Saddleback area. The plan to mine bauxite in the Chittering area and for a refinery to be built near Muchea has been abandoned.

Alumina

Rated capacity of the alumina plant at Gladstone, Queensland, is now 2,000,000 tonnes per annum, at Gove, Northern Territory, 1,000,000 tonnes and at Kwinana, Western Australia, 1,400,000 tonnes. Bauxite supplies for the Kwinana refinery are obtained from deposits 50 km away at Jarrahdale, Western Australia, the reserves of which are assessed as at least 500 million tonnes. The alumina plant at Pinjarra, Western Australia, has a rated annual capacity of 1,000,000 tonnes and uses bauxite from Del Park. This is to be expanded to 2,000,000 tonnes by the end of 1977. North of the Mitchell Plateau, at Cape Bougainville, a bauxite deposit of 995 million tonnes averaging 36 per cent total alumina has been outlined.

The Queensland Government approved draft legislation in November 1975 for the establishment of an alumina refinery based on bauxite to be mined at Aurukun, south of Weipa.

Copper

Mine production of copper at Mount Isa decreased to 136,000 tonnes in 1975. The mine at Mount Morgan, Queensland, is expected to close at the end of 1976 because reserves are nearly exhausted. Mine production increased at the Mammoth Mine, at Gunpowder, Queensland, in line with current expansion plans to lift production to 600,000 tonnes of ore per year.

Copper mining and smelting ceased in February 1975 at Tennant Creek, Northern Territory, because of technical and economic difficulties.

The mine at Mount Gunson, South Australia, continued to expand, becoming the fifth largest Australian copper producer in its first full year of operation.

A major copper lode has been outlined by drilling at Golden Grove, Western Australia, and a second deeper lode is indicated. Resource potential is assessed at 13.5 million tonnes with an average grade of 3.5 per cent copper.

Iron

The major development of recent years has been the establishment in Australia of a large scale iron ore export industry based principally on steelmaking requirements in Japan. Exports of iron ore and iron ore pellets in 1974 to Japan and elsewhere were 83.4 million tonnes valued at $588 million.

A magnetite beneficiation plant of 1.3 million tonnes per year capacity was commissioned in 1975 at Whyalla, South Australia.

In 1975 production and shipment capacity for pellets and fines shipped out of Cape Lambert from the Robe River deposits was increased to 5 million tonnes per year and 9.4 million tonnes per year respectively. The Mount Newman Consortium's program to expand production and shipment capacity to 40.6 million tonnes by 1976 was continued.

Silver, lead and zinc

Production of lead and zinc metal rose in 1975 to 390,000 tonnes and 460,000 tonnes respectively.

A summary of the Australian lead and zinc industry from 1953 to 1973 was published in the *Australian Mineral Industry Quarterly Review* Vol. 27, No. 4.

Two new silver-lead-zinc discoveries were reported in 1975. These were at Elura, near Cobar, New South Wales, where resources of 22 million tonnes averaging 5.6 per cent lead, 8.6 per cent zinc and 135 grams silver per tonne are indicated; and at Que River, north of Rosebery, Tasmania, the deposit has estimated resources of 4.2 million tonnes averaging over 0.36 per cent copper, 6.5 per cent lead, 11.6 per cent zinc, 107 grams silver and 2 grams of gold per tonne, and 0.64 million tonnes of 1.7 per cent copper, 3 per cent lead, 5.3 per cent zinc and 55 grams silver per tonne.

Deep drilling at the North Mine, Broken Hill, New South Wales, encountered lead-zinc-silver mineralization.

At the McArthur River deposit, Northern Territory, a two year testing program has commenced to obtain information for a comprehensive feasibility study of the deposit.

Black coal

There has been a significant revival in the Australian black coal industry in recent years as a result of increased exports and increased consumption of black coal in iron and steel production and electricity generation. These increases have more than balanced reduced consumption in some applications due to competition from fuel oil.

The expansion of the export trade has been of major significance. In 1955 exports were about 200,000 tonnes valued at about $1.7 million; in 1975 exports were 29.9 million tonnes valued at $780 million. These increased exports have been largely to Japan for use in the iron and steel industry and to Europe (steaming coal). As a result of this increased demand, new mines have been opened and others are under development in Queensland and New South Wales, and many established mines are being expanded. Exploration for coal has been stimulated and further rich deposits of coking coal and steaming coal have been located, particularly in Queensland.

Petroleum

At the end of 1975 there were seven oil fields in production: Moonie, Alton and Bennett in Queensland; Barrow Island in Western Australia; and Barracouta, Halibut and Kingfish in the Gippsland Shelf area offshore from Victoria in Bass Strait. The production of crude oil from these in 1975 amounted to 23,900,000 cubic metres representing 71 per cent of the year's total input to Australian refineries of crude oil and other feedstock of 33,600,000 cubic metres. The average daily production of 65,300 cubic metres in 1975 was about 6 per cent higher than the 61,400 cubic metres daily average in 1974. Natural gas production in 1975 amounted to 5,285 million cubic metres, 13 per cent more than in 1974. About 10 per cent of the 1975 total production was used in the field and processing plants and the balance was sold mainly as fuel to markets in Victoria, South Australia, Western Australia and Queensland.

Discoveries made in 1975 included one of oil (non-commercial) at Tidepole in the Dampier Sub-basin of the Carnarvon Basin, on the Northwest Shelf, offshore from Western Australia, and two of natural gas, one at Tidepole, and one at Sunrise, in the offshore part of the Bonaparte Gulf Basin.

The provisional figure for metres drilled in petroleum exploration and development in Australia in 1975 was 58,576 metres, which is some 79,950 metres (about 58 per cent) less than the metres drilled in the previous year. About 48,228 metres of the 1975 total was attributable to exploration drilling, of which 35,652 metres were drilled offshore. Of the 29 wells completed in 1975, 25 were exploration wells, of which 19 were offshore. In comparison with the previous year there was a decline of 27 in the number of exploration wells and 19 development wells; there was a decline of 12 in the number of offshore exploratory wells. Of the exploration wells drilled, 1 was completed as a potential oil and gas producer and 2 as gas producers; of the development wells 4 were completed as potential gas producers.

Nickel

Output from Australia's major nickel mining operation at Kambalda in Western Australia has grown to more than 37,000 tonnes of contained nickel per annum. Mines at Nepean, Scotia, Redross and Spargoville (Location 3) produce more than 8,000 tonnes contained nickel per annum. Production at the Mount Windarra mine was 12,000 tonnes of contained nickel in 1975.

The Agnew, Western Australia, project seems likely to proceed to the detailed design stage in August 1976 with a view to commencing production in 1978. A nickel sulphide concentrate will be produced for sale and planned output is about 10,000 tonnes of nickel metal in concentrates.

Mineral sands

The history of the mineral sands industry and an assessment of rescources in presented in the *Australian Mineral Industry—Quarterly Review* Vol. 25 No. 1.

Two mines commenced production on a commercial scale at Eneabba, Western Australia, in the later part of 1974. Two additional plants are expected to come on stream in 1976. By the end of 1976, installed capacity of about 150,000 tonnes of rutile per year should be available in the Eneabba-Jurien Bay area. A commercial 30,000 tonnes per annum upgrading plant was commissioned at Capel in June 1974 and by year end had achieved better than rated capacity.

Phosphate

Production of "direct shipping" grade rock commenced from the Duchess desposits in 1975; with the completion of a 68 km spur in 1976, the production will rise to 1 million tonnes per year and is expected to be expanded to 3 million tonnes by 1977.

Manganese

The program to expand production at Groote Eylandt from 1.3 million tonnes per year to 2 million tonnes per year was continued during 1975 and should be completed in early 1976.

CHAPTER 27

ELECTRIC POWER GENERATION AND DISTRIBUTION

This chapter is divided into three major parts: the Introduction, which deals briefly with the resources, generation and distribution, and future development of electric power in Australia; the Snowy Mountains Hydro-electric Scheme; and the origins, development, present situation and new projects of electrical systems in each Australian State and internal Territory.

The information contained in the chapter relates to situations existing and projects contemplated, and may be considerably affected by changes in policy or plans, or by developments in the projects themselves. Greater descriptive and historical detail about the various systems is contained in earlier issues of the Year Book. For further details *see also* the annual reports of the respective authorities. Statistics on the electricity industry are included in tables in Chapter 21, Manufacturing Industry.

INTRODUCTION

Distribution of population and location of electric power resources in Australia

The two principal centres of population and industry in Australia, the metropolitan areas of Sydney and Melbourne, make the greatest demands for electric power, and their growth has been associated with the development of large deposits of coal located relatively close to the source of demand. This, together with the fact that the major water resources are also located in the south-eastern portion of Australia, materially influences the distribution of industrial population and the location of major electric power stations. By far the most important source of energy used in the production of electric power in Australia is coal.

Most of Australia is poorly supplied with water, only about 13 per cent receiving an annual rainfall of 30 inches or over, and these areas are confined largely to Tasmania and to the narrow coastal strip along the east coast of the mainland. The only region on the mainland of Australia high enough to receive reliable winter snowfall, and from which, therefore, reasonably constant water supplies throughout the year can be expected, is the mountain chain which stretches from the high plateaux of south-eastern New South Wales to the north-eastern highlands of Victoria. The hydro-electric potential of this area is considerable; the two major projects in the area are the Snowy Mountains and Kiewa schemes. Other hydro-electric potential does exist on the mainland on the rivers of the coastal areas of New South Wales and Queensland, but the amount available is smaller than the potential of the Alpine region. In Tasmania, hydro-electric resources have been estimated at about 50 per cent of the total Australian hydro-electric potential. On the mainland the chief source of energy is coal; in Tasmania it is water.

Electric power generation and distribution

At the beginning of this century Australia's electrical undertakings were carried on mainly by private enterprise, but with some measure of government control designed to provide standards of safety and to define the scope and obligations of the private organisations. A trend towards public ownership commenced during the 1914–18 War and became more pronounced after the 1939–45 War. By 1961 all major generating stations supplying the public were, in varying degrees, under the control of statutory organisations constituted with the object of unifying and co-ordinating the generation and distribution of electricity supplies. There are still a large number of small private and municipal enterprises generating power for supply to country towns, although central authorities are extending supply to these places wherever practicable. In many areas it has been, and remains, the practice for central authorities to sell power in bulk to local distributing organisations which undertake reticulation.

In addition to the private, local government and statutory organisations which generate and/or distribute electricity for sale, numerous firms generate power for use in their own establishments, particularly those engaged in mining remote from the main centres of population. This chapter, however, is concerned mainly with the activities of central electric stations, as the power regularly produced for such internal consumption is, in any case, a relatively small proportion of the total power produced. The measures taken by authorities to satisfy the demand created by the post-war growth in population and building and by developments in industry and commerce are described in the following pages.

SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME*

Snowy Mountains Hydro-electric Power Act 1949

In July 1949 the Commonwealth Government established the Snowy Mountains Hydro-electric Authority, and empowered it to generate electricity by means of hydro-electric works in the Snowy Mountains Area; supply electricity to the Commonwealth Government (i) for defence purposes, (ii) for consumption in the Australian Capital Territory; and supply to a State, or to a State Authority, electricity not required for defence purposes or for consumption in the Australian Capital Territory.

The Snowy Mountains Act is supported by a detailed agreement between the States of New South Wales and Victoria and the Commonwealth Government with regard to the construction and operation of the Scheme, the distribution of power and water, charges to be made for electricity, and other such matters. The Snowy Mountains Council, established under the terms of the Agreement and consisting of representatives of the Commonwealth Government, the Authority and the two States, directs and controls the operation and maintenance of the permanent works of the Authority and the allocation of loads to generating stations.

Snowy Mountains Hydro-electric Scheme

The broad basis of the Snowy scheme is to transfer waters, which would otherwise flow to the sea unharnessed, from the Snowy River and its tributaries to the inland system, so that the water may be used for irrigation and to provide power. It involves two main diversions, the diversion of the Eucumbene, a tributary of the Snowy, to the Upper Tumut River, and the diversion of the main stream of the Snowy River at Island Bend and Jindabyne to the Swampy Plain River. These two diversions divide the scheme geographically into two sections, the Snowy–Tumut Development and the Snowy–Murray Development (*see* plate 61 opposite). For purposes of both power production and irrigation it is necessary to regulate run-off, and this is achieved by the use of Lake Eucumbene (formed by the construction of Eucumbene Dam) and other storages to control the waters of the Eucumbene, Murrumbidgee, Tooma, and Tumut Rivers for the Snowy–Tumut Development and of the Snowy and Geehi Rivers for the Snowy–Murray Development. A sectional diagram of the scheme appears on plate 62, page 976.

Snowy–Tumut Development. This development comprises works for the diversion and regulation of the waters of the Eucumbene, Upper Tooma, Upper Murrumbidgee, and Upper Tumut Rivers and their combined development through a series of power stations down the Tumut River. A major dam has been constructed on the Eucumbene River to create Lake Eucumbene, which has an ultimate useable storage of 4,300 million cubic metres. The waters of the Upper Murrumbidgee River are diverted into Lake Eucumbene by a dam at Tantangara and a 17-kilometre tunnel from Tantangara Reservoir. From Lake Eucumbene the water flows through a 23-kilometre tunnel to Tumut Pond Reservoir on the upper reaches of the Tumut River, where it joins the waters of the Tumut River itself and the waters of the Tooma River diverted to Tumut Pond Reservoir by a diversion dam and a 14-kilometre tunnel.

From Tumut Pond Reservoir water is conveyed by pressure tunnel to Tumut 1 underground Power Station (capacity 320MW), returned to the Tumut River and then by another pressure tunnel to Tumut 2 underground Power Station (capacity 280 MW), thence discharging into Talbingo Reservoir, also on the Tumut River.

Tumut 3 Power Station, the largest station of the scheme (generating capacity 1,500 MW and pumping capacity 300 cubic metres per second) has been constructed below Talbingo Reservoir and discharges into Jounama Pondage on the Tumut River. This pondage provides a downstream pumping pool and also regulates discharges from Tumut 3 Power Station as required. Releases from Jounama Pondage then enter Blowering Reservoir formed by Blowering Dam. This dam, constructed by the Snowy Mountains Authority as an agent for the State of New South Wales, provides for the regulation of power station discharges for irrigation use in the Murrumbidgee Valley. The Authority has constructed a power station at the foot of the dam to generate power from releases of water for irrigation purposes.

Snowy–Murray Development. The principal features of the Snowy–Murray Development are the diversion of the main stream of the Snowy River by tunnels, shafts, and pipelines westwards through

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* *See also* Chapter 23 Water Resources of this issue and special detailed article in Year Book No. 42, pp. 1103–30.

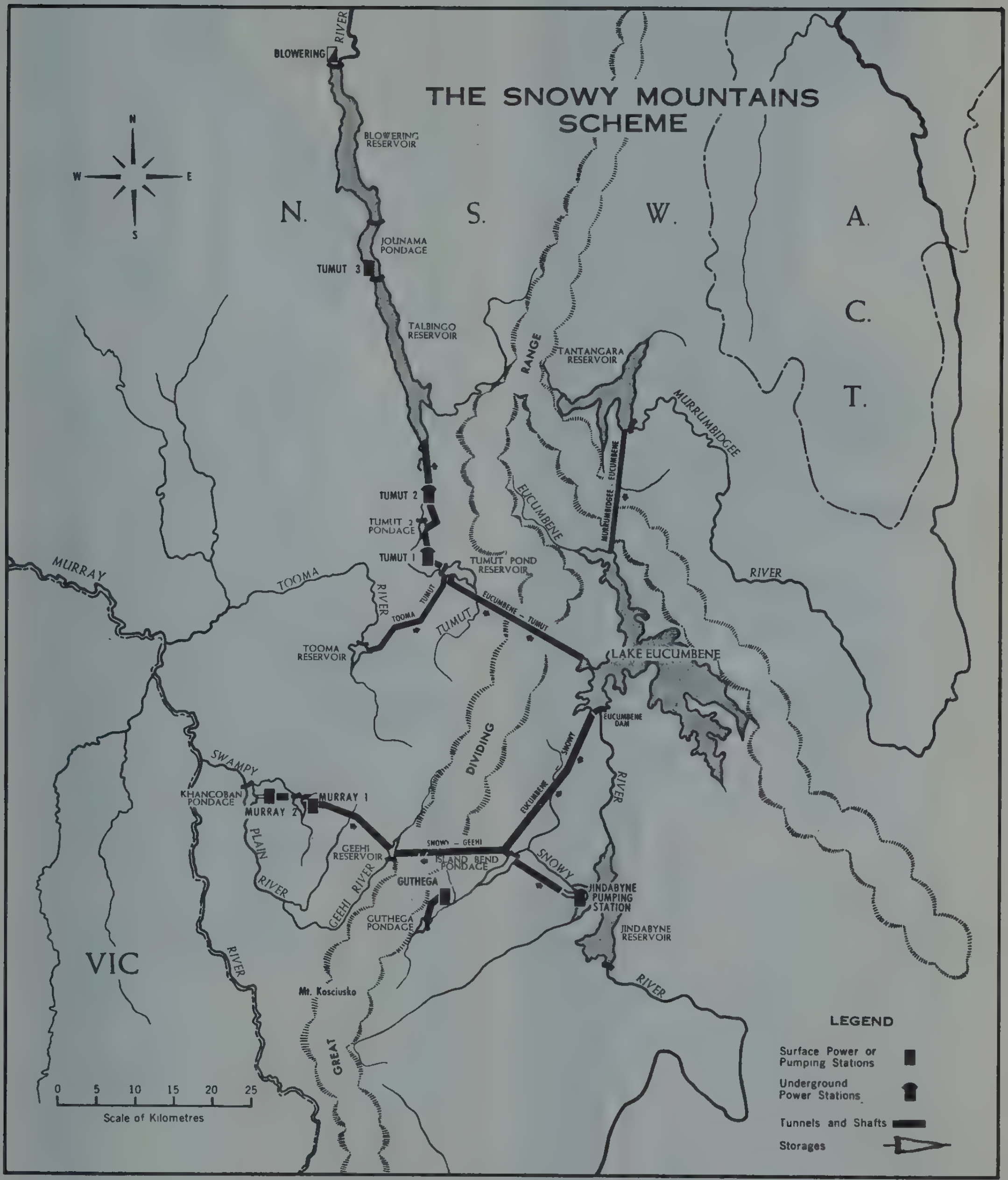
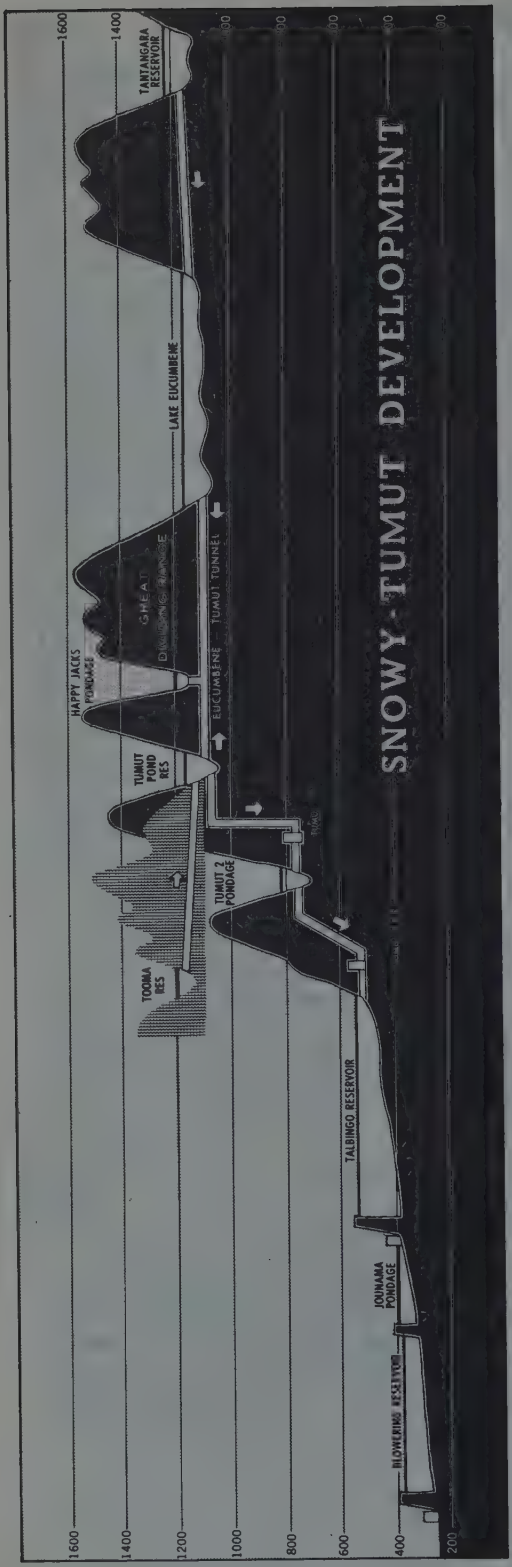

THE SNOWY MOUNTAINS SCHEME
N
S
W
E
N. S. W.
A. C. T.
VIC
BLOWERING
RIVER
BLOWERING RESERVOIR
JOUNAMA PONDAGE
TUMUT 3
TALBINGO RESERVOIR
TANTANGARA RESERVOIR
RANGE
MURRUMBIDGEE
MURRUMBIDGEE - EUCUMBENE
EUCUMBENE
RIVER
TUMUT 2
TUMUT 2 PONDAGE
TUMUT 1
TUMUT POND RESERVOIR
MURRAY
TOOMA
RIVER
TOOMA
TUMUT
TUMUT
EUCUMBENE - TUMUT
TOOMA RESERVOIR
LAKE EUCUMBENE
EUCUMBENE DAM
DIVIDING
SNOWY
EUCUMBENE
RIVER
SWAMPY
KHANCOBAN PONDAGE
MURRAY 2
MURRAY 1
PLAIN
RIVER
GEEHI RESERVOIR
SNOWY - GEEHI
ISLAND BEND PONDAGE
SNOWY
GEEHI
RIVER
GUTHEGA
GUTHEGA PONDAGE
JINDABYNE PUMPING STATION
JINDABYNE RESERVOIR
RIVER
RIVER
Mt. Kosciusko
GREAT
0 5 10 15 20 25
Scale of Kilometres
LEGEND
Surface Power or Pumping Stations
Underground Power Stations
Tunnels and Shafts
Storages

PLATE 61


SNOWY-TUMUT DEVELOPMENT
1600
1400
1200
1000
800
600
400
200
TANTANGARA RESERVOIR
LAKE EUCUMBENE
GREAT DIVIDING RANGE
EUCUMBENE - TUMUT TUNNEL
HAPPY JACKS PONDAGE
TUMUT POND RES
TUMUT 2 PONDAGE
TOOMA RES
TALBINGO RESERVOIR
JOUNAMA PONDAGE
BLOWERING RESERVOIR

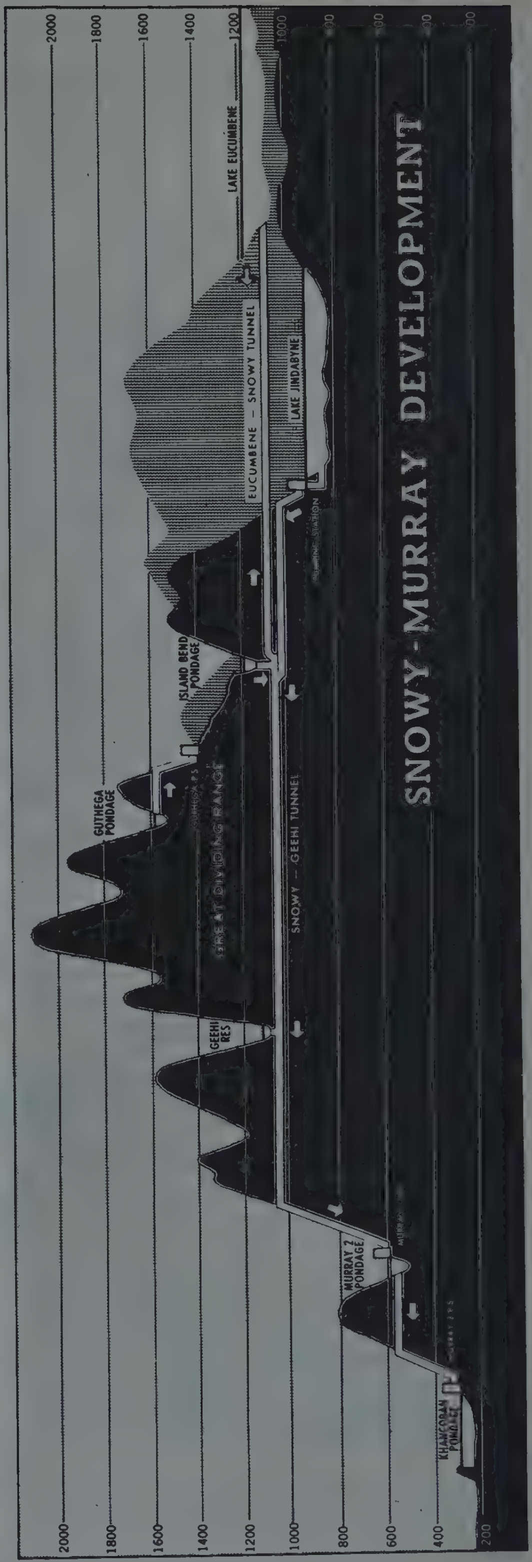

SNOWY-MURRAY DEVELOPMENT
2000
1800
1600
1400
1200
1000
800
600
400
200
LAKE EUCUMBENE
EUCUMBENE - SNOWY TUNNEL
LAKE JINDABYNE
PUMPING STATION
ISLAND BEND PONDAGE
GUTHEGA PONDAGE
GUTHEGA P.S.
GREAT DIVIDING RANGE
SNOWY - GEEHI TUNNEL
GEEHI RES
MURRAY 2 PONDAGE
KHANCOBAN PONDAGE

PLATE 62

the Great Dividing Range into the Swampy Plain River in the catchment of the Upper Murray, and the development of power on the western slopes of the Alps. The main works of the development are as follows:

(*a*) A tunnel from the Snowy River near Island Bend through the Great Dividing Range to Geehi Reservoir on the Geehi River, and two power projects between Geehi Reservoir and the Swampy Plain River near Khancoban. The power stations associated with these two power projects, Murray 1 and Murray 2, have a combined capacity of 1,500 MW.

(*b*) A tunnel from a dam on the Snowy River near Island Bend to Eucumbene Dam to carry Snowy water to Lake Eucumbene for storage at times of high river flows. When river flows are lower than average, this stored water is returned towards Island Bend and thence through the Snowy–Geehi Tunnel to Geehi Reservoir and Murray 1 and Murray 2 Power Stations.

(*c*) A dam on the Snowy River near Jindabyne to store the residual flow of the Snowy and Eucumbene Rivers downstream from Island Bend and Eucumbene Dams, including the flows of major tributories, the Crackenback and Mowamba Rivers; and a pumping plant, pipeline and tunnel to lift this water from Jindabyne Reservoir to the Snowy–Geehi Tunnel near Island Bend, where it joins the flow to the Geehi Reservoir for use through Murray 1 and Murray 2 Power Stations.

The power output of this section of the Scheme is increased by the Guthega Project, a subsidiary hydro-electric project on the Upper Snowy River above Island Bend with a generating capacity of 60 MW.

Utilisation of power from scheme

The future electric power plants on the mainland of Australia will be predominantly thermal or thermo-nuclear installations, and in an electrical system in which the greater part of the energy is generated in thermal plants it is usually found that the hydro installations operate to the best advantage on peak load. However, the existing New South Wales and Victorian systems include a proportion of relatively old and less efficient installations which, for reasons of fuel economy, are also best used for the production of peak load power. Therefore, in order to utilise the potential of the Snowy Mountains Scheme most effectively, the order of development was arranged so that the early stations operated, initially, somewhat below the peak of the system load, with a progressive change to predominantly peak load operation as construction proceeded and as the load increased in magnitude.

The Snowy Mountains Scheme is situated about midway between the principal load centres of Sydney and Melbourne and is connected to those cities by 330kV transmission lines. It is, consequently, in a position to take advantage of the diversity in the power requirements of these two load systems, a most important factor in so far as it affects the economy of operation of the supply systems of the two States. The average energy generated by the Snowy Mountains Hydro-electric Scheme is 5,070 million kWh a year. The Commonwealth Government reserves 670 million kWh for supply to the A.C.T., and Victoria receives one-third of the surplus and N.S.W. is entitled to the other two-thirds. For convenience, the Commonwealth Government's requirements are drawn from the New South Wales transmission network by an exchange arrangement between the Commonwealth Government and the Electricity Commission of New South Wales. Electricity over and above that required by the Commonwealth Government is divided between the States of New South Wales and Victoria in the ratio 2:1.

Progress of the scheme

The scheme's first power station, Guthega, of 60 MW capacity, came into operation in February 1955. It was followed by Tumut 1, an underground power station with a capacity of 320 MW, in 1959, and by the 280 MW Tumut 2 underground Power Station in 1962. Eucumbene Dam, which provides the major regulating storage for the scheme, was completed in May 1958. Tumut Pond Dam, completed in September 1958, provides the balancing storage for the power stations of the Upper Tumut Works. The first trans-mountain diversion of water from Lake Eucumbene to the Tumut River at Tumut Pond was made possible when the 23 kilometre Eucumbene–Tumut Tunnel was completed in June 1959. The 17 kilometre Murrumbidgee–Eucumbene Tunnel and the 14 kilometre Tooma–Tumut Tunnel came into operation early in 1961. Following the completion of the Upper Tumut Works, construction activity was concentrated on the Snowy–Murray Development. The first unit of this development, the Eucumbene–Snowy project which comprises Island Bend Dam and the 24 kilometre Eucumbene–Snowy Tunnel, commenced diverting Snowy River water to storage in Lake Eucumbene in August 1965. Completion of a 14 kilometre trans-mountain Snowy–Geehi Tunnel, the 12 kilometre Murray 1 Pressure Tunnel, the first of the 1.6 kilometre long Pressure Pipelines, and the first two units of the 950 MW Murray 1 Power Station in April 1966 allowed the first diversion of the water from the Snowy River to the Murray River in the west. All of the ten turbo-generators were brought into commercial operation with the opening of the Murray 1 Project in July 1967.

Khancoban Dam, designed to regulate power station releases before their discharge into the Murray River, was completed in February 1966. The Murray 2 Project in the base of the open cut excavated in the bank of Khancoban Reservoir downstream of Murray 1 Project was completed in 1969. The four units of Murray 2 Power Station totalling 550 MW came into commercial operation in October 1969. Construction is also complete on the Jindabyne Project. The earth and rockfill dam was completed in September 1967, and the pumping station and Jindabyne-Island Bend Tunnel came into service in February 1969.

Blowering Dam on the Tumut River came into service in May 1968, and the 80 MW Blowering Power Station began commercial operation in August 1971.

The total installed capacity of the scheme has now reached 3,740 MW.

For the Tumut 3 Project the construction of Jounama Dam was completed in 1968 so that the storage of water in Blowering Dam could commence. Talbingo Dam was completed in October 1970 and Tumut 3 Power Station was officially opened in October 1972 with two generators in operation. The succeeding four generators were brought into service to achieve full operation in 1974.

STATES AND TERRITORIES

New South Wales

In Year Book No. 39 an account was given in some detail of the origin and development of electricity generation and distribution in New South Wales. At present the following four Acts govern electricity supply in New South Wales.

The Local Government Act, 1919, which lays down the various rights and responsibilities of local government bodies in the establishment and operation of electricity trading undertakings.

The Gas and Electricity Act, 1935, established the Sydney County Council which is responsible for the distribution of electricity in a large part of the Sydney metropolitan area. The Act also amended the Local Government Act in certain respects.

The Electricity Development Act, 1945, which established the Electricity Authority of New South Wales as the body responsible for the promotion, regulation and co-ordination of electricity supply throughout the State including matters relating to electrical safety.

The Electricity Commission Act, 1950, which constituted the Electricity Commission of New South Wales as the major generating and bulk transmission authority.

Electricity Commission of New South Wales and electricity supply authorities

The main function of the Commission is the generation and transmission of electricity, which it sells in bulk to distributing authorities (mainly local government bodies) throughout a large part of the State, to the Government railways and to certain large industrial consumers. As the major generating authority, it is also responsible for the development of new power sources except in the Snowy Mountains region.

The retail sale of electricity to the public is, in general, carried out by separate electricity supply authorities. At 30 June 1975 there were 41 retail supply authorities throughout the State, comprising 34 electricity county councils (consisting of groups of shire and/or municipal councils), 2 city councils, 1 municipal council, 2 shire councils, and 2 private franchise holders. In addition to the Electricity Commission, 2 coal companies supply electricity in bulk to retail supplying authorities. Most of the small power stations which had operated in many country centres have closed down as the main transmission network has been extended.

Most electricity distribution areas have been consolidated into county districts consisting of a number of neighbouring local government areas grouped for electricity supply purposes, and administered by a county council comprising representatives elected by the constituent councils. Of the 222 cities, municipalities and shires in New South Wales, 215 are included in one or other of the 34 electricity county districts.

The Electricity Authority of New South Wales

The Electricity Development Act, 1945, confers broad powers on the Electricity Authority to co-ordinate and develop the public electricity supply industry. The functions of the Authority include the promotion of the use of electricity and especially its use for industrial and manufacturing purposes and for primary production. Technical advice is given to retail electricity supply authorities on various aspects of their activities such as the framing of retail electricity tariffs, public lighting and standardisation of materials and equipment. The Authority acts in an advisory capacity to the Minister for Mines and Energy on electricity distribution matters generally, and may make recommendations concerning the organisation of distribution, the amendment of the law relating to the generation, transmission, distribution and supply of electricity, or on any other matters affecting the electricity distribution industry.

The Authority administers the Rural Electricity Subsidy Scheme under which the rural electrical development of the State has now been virtually completed where the extension of supply is economically feasible. Under the subsidy scheme, local electricity suppliers receive subsidies from the Authority towards the cost of new rural lines. At 30 June 1975 the Authority was committed to the payment of $38,902,028 in subsidies, of which $32,435,374 had been paid. Further details of the operation of the scheme are given on page 956, Year Book No. 56.

The Electricity Development Act contains provisions for the making of regulations relating to most aspects of electrical safety. Regulations now in force cover such matters as consumers' installations, licensing of electricians and electrical contractors, approval of electrical articles, safety of linesmen, and overhead line construction and maintenance. In addition, a number of aspects not governed by legislation are covered by codes of practice or recommended procedures.

The Authority also administers the Traffic Route Lighting Subsidy Scheme, which provides for financial assistance to councils towards the cost of installation of improved lighting on traffic routes traversing built-up areas with the objective of reducing the incidence of night road accidents. Since the introduction of the scheme in 1964, subsidy has been approved in respect of some 1,404 kilometres of traffic routes throughout the State.

Generation and transmission

Of the State's electrical power requirements during the year ended 30 June 1975, 97.6 per cent was generated in New South Wales (78.4 per cent by coal fired power stations, 0.3 per cent by internal combustion plants, 16.5 per cent from the Snowy Mountains Hydro-Electric Authority and 2.4 per cent by other hydro-electric stations). Net interstate imports of electricity accounted for the remaining 2.4 per cent.

Major generating stations. At 30 June 1975 the major power stations of the State system of the Electricity Commission of New South Wales and their nominal capacities were as follows: Liddell (Hunter Valley), 2,000 MW; Munmorah (Tuggerah Lakes), 1,400 MW; Vales Point (Lake Macquarie), 875 MW; Wangi (Lake Macquarie), 330 MW; Tallawarra (Lake Illawarra), 320 MW; Wallerawang (near Lithgow), 240 MW; Pyrmont (Sydney), 200 MW. The total nominal capacity of the Electricity Commission's system as at 30 June 1975 was 6,377 MW. The greater part of the Commission's generating plant is concentrated within a one hundred and eighty-five kilometre radius of Sydney.

Major transmission network. The retailing of electricity to 97 per cent of the population of New South Wales is in the hands of local distributing authorities, which obtain electricity in bulk from the Commission's major State network. This network of 330 kV, 132 kV, 66 kV and some 33 kV and 22 kV transmission lines, links the Commission's power stations with the load centres throughout the eastern portions of the State, extending geographically up to 650 kilometres inland.

At 30 June 1975 there were in service 3,207 circuit kilometres of 330 kV and 6,282 kilometres of 132 kV transmission lines (including 206 kilometres operating for the time being at 66 kV). There were also in service 4,446 kilometres of transmission line of 66 kV and lower voltages, and 435 kilometres of underground cable. The installed transformer capacity at the Commission's 152 sub-stations was 21,423,450 kVA.

Separate systems and total State installed capacity. Several local government bodies operate their own power stations and generate portion of their requirements which is supplemented by interconnection with the system of the Electricity Commission. Of these the more important are the Northern Rivers County Council (installed capacity 28.75 MW) and the North-West County Council (15 MW). In addition a private company operates small stations supplying the towns of Ivanhoe and Wilcannia. The aggregate effective capacity for the whole of New South Wales systems and isolated plants was approximately 6,493 MW at 30 June 1975 and the number of ultimate consumers at this date was 1,789,337.

Future development

The major thermal stations at Liddell, Munmorah and Vales Point and those at Wangi, Tallawarra and Wallerawang are the main base load supply sources for the State.

The first 500 MW generating unit of the Liddell Power Station in the Hunter Valley was commissioned in 1971, followed by the second in 1972 and the third and fourth in 1973, making a total capacity of 2,000 MW.

Future projects include the installation of an additional 500 MW unit at Wallerawang and two 660 MW units at Vales Point to be in operation in 1976 and 1978 respectively. A further 500 MW unit is to be installed at Wallerawang in 1981. Two 660 MW units are scheduled to be installed at a new power site at Eraring in the early 1980's.

The development of the 330 kV main system is continuing. Work in progress includes the construction of major 330 kV transmission lines from Wallerawang to Sydney South and Sydney North to Sydney East. Two new 330 kV substations, Sydney East and Beaconsfield West, are being established in the Sydney Metropolitan Area. Other work is in progress and being planned throughout the State to augment the transmission system.

Hydro-electricity

The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains area (*see* Snowy Mountains Hydro-electric Scheme, page 974). Apart from this area, major hydro-electric stations are in operation at the Warragamba Dam (50 MW) and Hume Dam (50 MW). There are, in addition six smaller hydro-electric installations in operation in various parts of the State. A pumped-storage hydro-electric system to produce 240 MW, is being installed as part of the Shoalhaven Scheme in conjunction with the Metropolitan Water Sewerage and Drainage Board. This project is now nearing completion.

Victoria

A detailed description is given in Year Book No. 39 of the development of the generation and supply of electricity in the cities of Melbourne, Geelong, Ballarat and Bendigo to the time of the creation of the State Electricity Commission in 1921 and the early development of the Commission's undertakings.

State Electricity Commission of Victoria

Established under earlier legislation and currently operating under the provisions of the *State Electricity Commission Act* 1958 as a semi-government authority, the Commission is administered by a full-time Chairman and three part-time Commissioners. The Minister for Fuel and Power is responsible under the *Fuel and Power Act* 1965 for the operations of the Commission.

The principal function of the Commission is to generate or purchase electricity for supply throughout Victoria. For this purpose it is vested with the authority to own, erect and operate power stations and other electrical plant and installations; and to supply electricity to individual consumers or in bulk to any public institution or corporations and municipalities which have a franchise to sell direct to customers. The Commission may own, develop and operate brown coal open cuts, and briquetting plants and develop the State's hydro-electric resources. It is required to meet from its own revenue, which it controls, all expenditure involved in operating its power and fuel undertakings and to provide for statutory transfers to the Consolidated Revenue fund of the State.

The Commission is the controlling authority for all electrical undertakings in Victoria. It administers the *Electric Light and Power Act* 1958 and is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of methods and materials used in installations and the testing and approval of electrical equipment and appliances.

Since it began operating in 1921 the Commission has expanded and co-ordinated the generation, purchase and supply of electricity on a State-wide basis to the stage where its system generates almost all the electricity produced in Victoria which has an area of 227,600 sq km and the transmission network covers practically the entire population of the State.

Victoria's electricity system is based on the utilisation of the extensive brown coal deposits in the La Trobe Valley in Central Gippsland.

In 1974–75 the output of brown coal from the Commission's three open cuts at Yallourn, Yallourn North and Morwell totalled 25.3 megatonnes of which 23.1 mt were used in the Commission's power stations. Apart from the brown coal 172 kilotonnes of briquettes and 19.4 kt of fuel oil were used as fuel in power stations.

Electricity generation, transmission and supply

In 1974–75 the Commission generated in its thermal and hydro-electric power stations or purchased 17,033 GWh. The total installed generating plant capacity at 30 June 1975 was 4,395 MW.

The power stations are interconnected and feed electricity into a common pool for general supply. The major generating plant in the interconnected system is the 1,600 MW Hazelwood base load, brown coal fuelled, power station near Morwell in the La Trobe Valley, which alone generates over 50 per cent of Victoria's electricity. Other brown coal power stations in the interconnected system comprise the established base load stations at Morwell and Yallourn and the partially completed Yallourn 'W' station. Peak load steam stations are located in Melbourne (Newport, Richmond and Spencer Street). Hydro-electric stations are located at Kiewa, at Eildon, on the Rubicon and Royston Rivers near Eildon and at Cairn Curran. All generators for public supply within Victoria are owned by the Commission except Spencer Street Power Station, which remains the property of the Melbourne City Council, although operated as a unit of the interconnected system.

Generation in thermal stations is supplemented by supply from the Commission's hydro stations in the mountains in the north east of the State and by entitlements from the Snowy Mountains Hydro-electric scheme in south-eastern New South Wales (one third of output after provision for the Commonwealth Government's needs) and the Hume Power Station (half of output) on the Murray River boundary with New South Wales. The Snowy Mountains Scheme is linked to the Victorian system by a 330 kV transmission line which allows for a two-way interchange with New South Wales.

At 30 June 1975 the electrical transmission and distribution system in the State supply network comprised 103,536 km of overhead lines and 2,599 km of underground lines. There are 4 auto-transformation stations, 26 terminal substations, 169 zone substations and 71,680 distribution substations. Transmission is mainly by 500, 330, 220 and 66 kV lines which supply the principal distribution centres and provide interconnection between the power stations. The total length of the 500, 330 and 220 kV lines is 3,691 km.

The Commission sells electricity retail in all Victorian supply areas except for eleven Melbourne metropolitan municipalities. These municipalities purchase electricity in bulk from the Commission and retail it to approximately 260,000 customers within the municipalities concerned under franchises granted by the Victorian Government before the Commission was established in 1921. Bulk supply is also provided to several municipalities in New South Wales and to a number of towns and areas bordering the Murray River.

Retail supply is administered through the Melbourne metropolitan branch and nine extra-metropolitan branches at Geelong, Ballarat, Bendigo, Dandenong, Traralgon, Mildura, Colac and Horsham. District supply offices are located in Melbourne and all other major cities and towns in the State.

Complete electrification of the State has virtually been achieved. At 30 June 1975 the Commission had 1,159,500 retail customers excluding bulk sales. There were 982,500 domestic, 82,200 industrial and 94,500 commercial consumers. In country areas electricity was supplied to about 75,000 farms.

Current and future development

The only power station currently under construction is Yallourn W in the La Trobe Valley. It is designed as a 4 unit, base load, station of 1,450 MW capacity fuelled by brown coal. The first two 350 MW units are now in commission. The second two units, each of 375 MW capacity, are scheduled to begin operating in 1980 and 1981. The Commission plans to erect a 1,000 MW natural gas fired power station at Newport to come into operation at the end of the decade. A hydro-electric station with one 150 MW unit capacity will be built at Dartmouth in north-eastern Victoria in conjunction with the dam currently under construction, to come into operation about 1979–80. A major, base load, generating complex of about 4,000 MW capacity at Loy Yang in the eastern part of the La Trobe Valley is planned to begin operating in the early 1980's.

Queensland

In Year Book No. 39 an account is given of the growth of electricity generation in Queensland, with particular reference to south-eastern Queensland, and of the events leading up to the establishment in 1937 of the State Electricity Commission of Queensland. In Year Book No. 53 an account is given of the post-war development and organisation of the electricity supply in Queensland.

Electricity supply in Queensland is governed by the following Acts which are administered by the Commission.

'*The State Electricity Commission Acts*, 1937–1965.' These Acts constituted the Commission and define its powers and duties.

'*The Electric Light and Power Act*, 1896–1972.' This Act relates to the constitution of electric authorities, except the Southern Electric Authority and the Northern Electric Authority, and defines their powers and duties and the conditions under which electricity is to be supplied and used.

'*The Regional Electric Authorities Acts*, 1945–1964.' These Acts provide for the constitution of Regional Electricity Boards representative of the Commission and the Local Authorities within each region, and define their powers and responsibilities.

'*The Southern Electric Authority of Queensland Acts*, 1952–1964.' These Acts established the Southern Electric Authority and define the powers and responsibilities of the Authority.

'*The Northern Electric Authority of Queensland Act*, 1963–1964.' This Act established the Northern Electric Authority. It also defines its powers and responsibilities.

'*The Electrical Workers and Contractors Act*, 1962–1974.' This Act provides for the certification of electrical workers and for the licensing of electrical contractors.

State Electricity Commission of Queensland

The Commission commenced to function in January 1938. The Commission is the statutory authority concerned, *inter alia*, with the administration of electricity supply legislation, the general control, organisation and efficient development of the electricity supply industry in Queensland, the forward planning of such development, the control of electricity charges, the administration of regulations and rules relating to safety, the raising of capital, the provision of engineering and consulting services, the promotion of the use of electricity, particularly in manufacturing and rural industries, and the fixing of standards. In addition, it is an authority to which consumers may appeal on matters in dispute between them and their electric authorities. The Commission is also empowered to own and operate generating stations and transmission lines and to sell electricity in bulk.

Organisation

Regional electrification, with centralised generation and main transmission, is the predominant feature of the organisation of the electricity supply industry in Queensland. The more populous eastern part of the State is served by three major networks.

The southern network embraces the areas of supply of the Southern Electric Authority, the Brisbane City Council, the Wide Bay-Burnett Regional Electricity Board, and the Dalby Town Council. Generation and main transmission in this area are the responsibility of the Southern Electric Authority, which sells energy in bulk to the other three Authorities. The Wide Bay-Burnett Board also operates its own base load power station at Howard. The Southern Electric Authority is also responsible for the distribution of electricity to a large area of South-East Queensland outside metropolitan Brisbane.

The central network which is interconnected with the southern network by a 275 kV transmission line is within the area of supply of the Capricornia Regional Electricity Board. The Board is responsible for the generation, main transmission and distribution of electricity.

The northern network covers the areas of supply of the Cairns, Townsville, and Mackay Regional Electricity Boards. Generation and main transmission are the responsibility of the Northern Electricity Authority which sells electricity in bulk for distribution by the three Regional Electricity Boards. In addition, the Cairns Regional Electricity Board operates small internal combustion generating stations at certain isolated centres in its area, and the Townsville Regional Electricity Board supplies the western area of its region by means of a distribution system based on an internal combustion station at Hughenden.

West of the three main networks the form of organisation which has been adopted is determined by the stage of electrical development which has been reached. Immediately west of the Capricornia region the Central Western Regional Electricity Board operates an interconnected system with generation centralised at internal combustion stations at Longreach and Barcaldine. Other smaller regions of electricity supply are centred on Roma and Mount Isa. In addition, parts of southern Queensland are supplied by the Tenterfield Municipal Council and the North West County Council of New South Wales, whilst the Balonne Shire Council purchases electricity in bulk from the Electricity Commission of New South Wales. In the remaining parts of Western Queensland there are a number of isolated electricity undertakings operated by Shire Councils.

It is proposed that the industry be reorganised by making the 22 existing electricity authorities into 8 new authorities. Draft legislation to give effect to this proposal is well advanced.

Electricity generation, transmission and distribution

Electricity generated in the State is based primarily on steam power stations using black coal, 90 per cent of the total production during 1974–75 being derived from this fuel. Hydro-electric stations, located mainly in North Queensland provided 9 per cent, and the balance of the production was provided from internal combustion and gas turbine stations. These gas turbine stations use oil as their energy source. All of the internal combustion diesel stations use oil as fuel but the power station at Roma also uses locally produced natural gas. Electricity generated by public electricity undertakings in Queensland during 1974–75 totalled 8,272 million kWh. A further 104 million units were purchased in bulk from other producers of electricity for re-distribution to consumers.

At 30 June 1975 the total generating capacity of Queensland public electricity undertakings was 2,073 MW comprising 1,789 MW of steam plant, 132 MW of hydro-electric plant, 37 MW of internal combustion plant and 115 MW gas turbine plant.

The southern electricity network is served by the following steam power stations: Bulimba 'A' (65 MW), Bulimba 'B' (180 MW), Tennyson 'A' (120 MW), Tennyson 'B' (120 MW), Swanbank 'A' (396 MW), Swanbank 'B' (480 MW) and Howard (37.5 MW) together with gas turbine stations—Swanbank 'C' (30 MW) and Middle Ridge (60 MW). The central network is served by power stations at Rockhampton (52.5 MW steam and 25 MW gas turbine) and at Callide (120 MW) steam). The northern electricity network is supplied by steam power stations at Collinsville (180 MW) and Townsville (37.5 MW) and hydro-electric stations at Kareeya (72 MW) and Barron Gorge (60 MW).

The electrical transmission and distribution systems within the State comprised over 91,721 circuit kilometres of electric lines at 30 June 1975. The main transmission voltages are 275 kV, 132 kV, 110 kV, 66 kV and in certain areas 33 kV and 22 kV. The electricity supply industry's extensive rural electrification program continued using the single wire earth return system.

At 30 June 1975 the total number of electricity consumers was 670,989 of whom 246,642 were in the Brisbane metropolitan area.

Future development

Major development of the State's generating capacity is concentrated on the construction of the power station at Gladstone (1,100 MW). The Gladstone power station will comprise four 275 MW generating sets, the first of which is expected to be commissioned early in 1976.

Construction of the second 275 kV line between Southern and Central Queensland is well advanced and it is expected that this reinforcing link will be in service in 1976. The 275 kV connection between Gladstone and the northern grid is programmed for completion in 1977.

A 34 MW gas turbine plant is to be installed at Mackay and site work has commenced.

Two 660 kW sets have been installed at Barcaldine with tenders being called for two further 1,615 kW sets. The 66 kV interconnection between Barcaldine and Longreach was completed in May 1975.

Two 4 MW generating sets are on order by the Roma Town Council to cater for the continuing load growth in the area.

South Australia

A general historical survey concerning the electricity supply industry in South Australia is given in Year Book No. 39, page 1186. The survey traces the development of the industry from its formation in South Australia in 1895 until the establishment of the South Australian Electricity Commission in 1943.

Electricity Trust of South Australia

In 1946 the assets of the Adelaide Electric Supply Co. Ltd were transferred to a newly formed public authority, the Electricity Trust of South Australia, which became responsible for unification and co-ordination of the major portion of the State's electricity supply and which took over the powers previously vested in the South Australian Electricity Commission. In addition to the powers specified in the Adelaide Electric Supply Company's Acts, 1897–1931, the Trust may supply electricity direct to consumers within a district or municipality with the approval of the local authority, and by agreement with other organisations which generate or supply electricity, arrange to inter-connect the mains of the Trust with those of other organisations, and give or receive supplies of electricity in bulk.

Capacity and production

Of the total installed capacity in South Australia at 30 June 1975, the Electricity Trust operated plant with a capacity of 1,185 MW, and is the most important authority supplying electricity in the State. There were approximately 495,000 ultimate consumers of electricity in the State, of whom 490,000 were supplied directly and approximately 5,000 indirectly (i.e. through bulk supply) by the Trust. Its major steam stations are Osborne (240 MW), Port Augusta Playford 'A' (90 MW) and Playford 'B' (240 MW), and Torrens Island (480 MW).

The Trust operates two smaller stations, the Mt Gambier Station has an installed capacity of 22 MW and Pt Lincoln 9 MW—both locations are connected with the Trust's interconnected system with 132 kV lines. In addition, the Trust operates a turbo-generator station at Dry Creek (104 MW).

The two main fuels used by the Trust are sub-bituminous coal from Leigh Creek for the Port Augusta, Playford power stations and natural gas from the Gidgealpa-Moomba field for the Torrens Island and Dry Creek stations.

Western Australia

For information on the early history of electricity supply in the metropolitan area, *see* Year Book No. 39, page 1189.

State Energy Commission of Western Australia

On 1 July 1975 the Government of Western Australia combined the State Electricity Commission and the Fuel and Power Commission to form a new organisation known as the State Energy Commission of Western Australia. The new Commission is specifically charged with the responsibility for ensuring the effective and efficient utilisation of this State's energy resources and for providing its people with economical and reliable supplies of electricity and gas.

The Commission operates coal-burning power stations at East Perth, South Fremantle, Bunbury and Muja and an oil and gas burning station at Kwinana. A small hydro-electric station is situated at Wellington Dam near Collie and at Geraldton there is a gas turbine generating plant. A uniform tariff electricity supply is provided from these stations through an interconnected grid system to the Metropolitan Area, the South-West and Great Southern Areas, including an area extending eastward to Kollyanobbing and northwards as far as Ajana beyond Northampton. The Commission also owns and operates diesel power stations at Port Hedland, Halls Creek, Roebourne, Kununurra, Esperance and Onslow.

Small electricity supply systems too remote to be connected to the grid system or supplied from the Commission owned diesel stations are still controlled by local government authorities and are being absorbed in a leasing arrangement whereby the local generating plant and distribution system is operated by the Commission under an arrangement known as the Country Town's Assistance Scheme. Under the scheme, the Commission undertakes to operate, maintain, replace or upgrade plant and supply equipment as necessary. At the present time there are twenty-six country towns supplied under the provisions of the Country Towns' Assistance Scheme.

Natural gas is reticulated in most areas of the Perth metropolitan region and in Pinjarra, whilst simulated natural gas (SNG) is reticulated in the Bunbury area and tempered liquified petroleum gas (TLP) in Albany.

Some details of the Commission's activities for the year ending June 1975 are: Number of electricity consumer accounts 317,069 and 62,284 gas consumer accounts; electricity generated 3,564 million kWh; gas sold 776,569,000 units; fuel used for electricity generation 1,709,000 tonnes of coal, 186,000 tonnes of fuel oil, and 26,389,000 litres of diesel fuel.

Sales for the year ending 30 June 1975, compared with those for the preceding year, show an increase of 6.57 per cent for electricity and 27.0 per cent for gas.

Tasmania

A considerable part of the water catchment in Tasmania is at high level, with a substantial natural storage available, and this has made it possible to produce energy at a lower cost than elsewhere in Australia and in most other countries. Another factor contributing to the low cost is that rainfall is distributed fairly evenly throughout the year with comparatively small yearly variations. Abundant and comparatively cheap supplies of electricity played an important role in attracting industry to Tasmania. However, in recent years Tasmania's advantage in selling electric power has been reduced. A cost differential favouring Tasmania still exists but it is no longer as marked. For information on hydro-electric development in Tasmania prior to the establishment of the Hydro-Electric Commission in 1930, *see* Year Book No. 39, pages 1192–3.

Hydro-Electric Commission

In 1929 the Government passed the *Hydro-Electric Commission Act* 1929, which established the Hydro-Electric Commission and vested in the Commission, with some minor exceptions, the right to use the waters of the State of Tasmania, and authorised it to develop and reticulate electric power for all purposes. In 1930 this corporate body took over the State hydro-electric undertaking and the business of the Hydro-Electric Department.

Output and capacity of hydro-electric system

The following table outlines the development of the Tasmanian generating system.

TASMANIAN POWER GENERATING SYSTEM

Station	Year of commission	Head (metres)	Generator capacity (*MW*)(*a*)	Assessed annual capacity(*b*) (million *kWh*)
COMPLETED STATIONS				
Waddamana 'B'	1949	344	48.0	(*c*)
Tarraleah	1951	299	90.0	583
Butlers Gorge	1951	56	12.2	68
Trevallyn	1955	126	80.0	541
Tungatinah	1956	306	125.0	552
Lake Echo	1956	173	32.4	75
Wayatinah	1957	62	38.2	265
Liapootah	1960	110	83.7	439
Catagunya	1962	43	48.0	251
Poatina	1965	829	250.0	1,275
Tods Corner	1966	41	1.6	13
Meadowbank	1967	29	40.0	200
Cluny	1967	16	17.0	89
Repulse	1968	27	28.0	154
Rowallan	1968	49	10.4	37
Lemonthyme	1969	159	51.0	284
Devils Gate	1969	69	60.0	298
Wilmot	1971	251	30.6	127
Bell Bay (Stage 1)	1971	(*d*)	120.0	788
Cethana	1971	99	85.0	407
Paloona	1972	31	28.0	131
Fisher	1973	649	43.2	245
Bell Bay (Stage 2)	1974	(*d*)	120.0	788
Total	..	..	*1,442.4*	*7,610*
STATIONS UNDER CONSTRUCTION				
Gordon (Stage 1)	1977	186	288.0	1,466
Poatina (*e*)	1977	829	50.0	..
Mackintosh	1981	68	72.0	..
Rosebery	1983	63	76.5	..
Pieman	1985	93	270.0	..
Total	..	..	*756.5*	..

(*a*) Emergency gas turbine generating capacity of 21,000 kW at Bell Bay not included. (*b*) Assessed annual capacity is based on simulated operation of the whole system for hydro-electric plant. The figures for thermal plant correspond to a capacity factor of 75 per cent. (*c*) Reserve plant only. (*d*) Thermal station. (*e*) Additional generator to be installed in the existing station.

Although Tasmania has only three percent of Australia's population, it produces ten percent of Australia's total electricity. In 1974–75, electricity generation in Tasmania totalled 5,949 million kilowatt hours.

New capacity

The Gordon River Power Development, Stage 1, to be completed in 1977, will create the largest water storage in Australia. The Lake Pedder storage was created by a combination of two dams and a levee on the Serpentine and Huon Rivers while Lake Gordon resulted from a single dam on the Gordon River. Water will be carried from the Gordon storage by a vertical shaft and short horizontal tunnel to a power station 186 metres underground. The station is designed to be operated by remote control from Hobart, 160 kilometres away, and to have an initial capacity of 288 MW.

A hydro-electric development on the Pieman, Murchison and Mackintosh Rivers in western Tasmania was approved by Parliament in 1971. Total installed capacity of the scheme will be approximately 420 MW. Preliminary construction works are now in progress and operation of the first stage of the development is expected to commence in 1981, with the completion of the whole development scheduled for about 1985.

The Commission is conducting extensive surveys and investigation of other schemes with a view to further construction after the completion of the present program. It is estimated that the potential which can be developed economically should ultimately harness 3,000 MW to the system.

Australian Territories

Australian Capital Territory

The supply authority is the A.C.T. Electricity Authority, which took over the functions of the Canberra Electric Supply Branch, Department of the Interior, on 1 July 1963. Supply was first made available in Canberra during 1915 and was met from local steam plant. Connection to the New South Wales interconnected system was effected in 1929, and all requirements are now taken from this system. Locally owned plant consists of 4 MW of diesel alternators which are retained as a standby for essential supplies. The total number of ultimate consumers at 30 June 1975 was 62,632. During the year 1974–75 the bulk electricity purchased was 924,077,000 kWh and the system maximum demand was 235.3 MW.

Northern Territory

Electricity is supplied in the main population centres by the Department of the Northern Territory through the Electricity Supply Division of the Department of Construction.

An oil fired steam power station is operated at Darwin with 66 kV transmission. Alice Springs, Pine Creek, Katherine, Tennant Creek, Elliott and Daly Waters are supplied by diesel power stations.

The Stokes Hill Power Station has an installed capacity of 70.5 MW with an additional 23.5 MW set now being installed and due for commissioning in 1976. A 10 MW gas turbine was commissioned in 1974. A contract has been let for the last stage of development of the Stokes Hill Power Station, comprising two 23.5 MW sets, which, when completed in late 1978, will give the station a capacity slightly in excess of 141 MW. Preliminary planning for a second power station in Darwin is proceeding.

Cyclone Tracy devastated Darwin on Christmas Day 1974, resulting in most of the transmission and distribution systems being destroyed. Electricity supply authorities from all parts of Australia aassisted in rebuilding the electricity supply system. Connections were made to temporary dwellings but no charges were made for electricity up to May 1975.

A new diesel station was commissioned in Alice Springs in 1973 and together with the old station has an installed capacity of 26.6 MW. Tenders are expected to be called by the end of 1976 for a fourth 5.6 MW diesel alternator set.

Katherine is supplied by a 7 MW diesel station. A 2.03 MW diesel alternator set has been transferred from Alice Springs and is due for completion in 1976.

A new 4.7 MW diesel power station in Tennant Creek has been commissioned to supply the town after the agreement with Peko N.L. for the purchase of bulk electricity expires. It is planned to instal a fourth 1.56 MW diesel alternator during 1977–78.

In February 1975 a new 0.4 MW diesel power station and reticulation system was commissioned to supply a number of railway centres.

Mataranka Aboriginal communities generate their own electricity as do Nabalco which operate a 120 MW oil fired steam power station and a large diesel station at Gove.

Statistical Summary

For a summary of operations of electricity establishments in 1969–70 and 1971–72, *see* Chapter 21, Manufacturing Industry, pages 736–7.

CHAPTER 28

SCIENCE AND TECHNOLOGY

Further and more detailed information on topics presented in this chapter may be found in the annual reports of the organisations mentioned, particularly the Department of Science, the CSIRO and its divisions, the Australian Atomic Energy Commission, and the Department of Defence. Statistical information for the years 1968–69 and 1973–74 may be found in the reports published by the Department of Science on Project SCORE (*see* page 989). Also relevant are reports published by the then Office of Secondary Industry of the Department of Trade and Industry (*Survey of Industry Research and Development in Australia 1968–69*) and by the then Department of Manufacturing Industry (Bulletin No. 11, November 1974 *R & D in Manufacturing Industry 1971–72*).

In this chapter references will be found to other chapters of the Year Book which deal in greater detail with particular fields of research and development activity.

Overview

Prior to the 1914–18 war, Australian science was based largely on the individual achievements of a few outstanding scientists.

During and after that war, governments in various parts of the world took initiatives aimed at encouraging scientific research and its application to economic growth and national development. Australia was no exception, but the research was concentrated mainly in the government sector and was aimed primarily at agriculture; the universities and industry were little involved.

With the approach of the 1939–45 world war, however, moves were made to extend scientific support for secondary industry. In the CSIR (Council for Scientific and Industrial Research), Divisions created in the period 1937–40 were to play an important part in the rapid development of Australian industry that occurred under the stimulus of war-time needs.

When peace came, expansion of scientific research in general and industrial research in particular continued. This expansion extended beyond government into the universities and industry.

Though agricultural research, even today, absorbs a significant proportion of Australia's research effort, industrial, medical and defence research are now of major importance also. The volume of research in the social sciences remains small, though in Australia as elsewhere in recent years, there has been increasing support for the view that adequate weight must be given in governmental policy-making to the social aspects of national growth.

In 1973–74, the most recent year for which data are available, total expenditure on research and development (R & D) in both the natural and social sciences was estimated at $651 million, approximately equivalent to 1.3 per cent of the Gross Domestic Product ($50,557 million) in that year. The data are summarised in the table on page 989.

In 1973–74, governments in Australia provided approximately 60 per cent of the funds devoted to R & D and undertook in their own agencies approximately 42 per cent (in terms of expenditure) of the overall national R & D effort.

Whilst these data serve to illustrate the dominant position occupied by governments in Australian scientific and technological research and development activities, they do not provide a complete picture since comprehensive information is not available on resources devoted to other scientific and technological activities in Australia.

Advice and co-ordination

In recent years Governments have shown increased concern with the adequacy of channels for advice on science and technology. Advisory bodies have been established, charged with making recommendations concerning a broad range of scientific and technological activities. At the national level, the Commonwealth Government appointed an Advisory Committee on Science and Technology (ACST) in 1972. This Committee was disbanded in 1973 and an Interim Australian Science and Technology Council (ASTEC) established in May 1975. At the State level, the New South Wales Government appointed a New South Wales Science and Technology Council in February 1976.

Prior to the establishment of advisory bodies with a wider role, a number of official advisory bodies had been established to deal with sectoral interests. Such bodies include: the Australian Research Grants Committee (ARGC), the Universities Commission, the CSIRO Advisory Council and State Committees, the Defence Science Board, the Defence Research, Development, Trials and Evaluation Review Committee, and the National Health and Medical Research Council (NH & MRC).

ASTEC'S establishment followed an intensive period of discussion and review concerning arrangements for the provision to the Government of adequate advice on policies for science and technology in Australia. Following the dissolution of the ACST in January 1973, a Green Paper *Towards an Australian Science Council* was issued by the then Minister for Science in March 1974, which invited public discussion and comment on issues related to the establishment of a science council. Further stimulus was provided by the review of Australian science and technology undertaken by the OECD during 1974, which resulted in the issue in September of the *OECD Examiners' Report on Science and Technology in Australia*. This report delineated some of the structural and policy problems facing the organisation, management and further development of science and technology in Australia, as perceived by the examining team, and described approaches which had been taken in other countries in an attempt to meet similar problems. The Examiners' Report was widely discussed within Australia and was the subject of a meeting at the OECD in October 1974.

These various deliberations culminated in the issue by the Government in January 1975 of a White Paper *Science and Technology in the Service of Society—The Framework for Australian Government Planning*. Features of this framework included a Ministerial Committee on Science and Technology, the Australian Science and Technology Council (ASTEC), a Parliamentary Science and Technology Forum, and the Department of Science.

The role of ASTEC was envisaged in the White Paper as including broad functions of reporting and making recommendations to the Government. Following the election of a new Government in December 1975 the interim ASTEC was re-constituted and requested to prepare by the end of 1976 a report which would assist the Government in its decisions on the establishment of a permanent science and technology council. The policy of the Government envisages that the Council will be the major independent advisor to government on such matters as:

the development and application of science and technology to national needs and objectives;
new areas of science and technology which are of importance to Australia, including fields of industrially and commercially oriented research and development;
the balance, adequacy and effectiveness of national efforts in various fields of science and technology, including defence science, and means for improving efficiency in the use of resources;
the relative importance of efforts in those fields of science and technology which may contribute to national economic and social development and welfare and to the advancement of scientific knowledge; and,
the effective development and utilisation of scientific and technological manpower.

Successive Governments have seen the Department of Science as having a complementary role in relation to an advisory council on science and technology. As a government department it has ready access to information available to government concerning civil science and technology, and is able to provide a scientific and technological perspective at the interdepartmental level. The Department's role includes the fostering of closer working relationships and consultation among government agencies, tertiary institutions, scientific associations, the private sector and the community. The Department's administrative functions in relation to certain scientific services and research activities (such as the Bureau of Meteorology, the Commonwealth Government Analytical Laboratories, and the Antarctic Division) help to ensure that its policy advice is tempered with an awareness of practical problems in science and technology.

Advice to government on scientific and technological issues comes also from various learned and professional bodies. Such counsel may be offered on the initiative of the organisation itself or in response to an official request. For example, the Australian Academy of Science maintains a number of sectional and standing committees which specialise in selected, broad fields of science; ad hoc advisory committees are appointed by the Academy from time to time to examine and report on specific matters. In addition, the Academy has maintained since 1967 a Science and Industry Forum which brings together leading scientists and industrialists to discuss topics of national significance; a complementary Science and Society Forum was inaugurated in 1973.

The most broadly based of the learned and professional bodies is the Australian and New Zealand Association for the Advancement of Science (ANZAAS). The Association has established a Science Policy Commission to give increased attention to policy issues. Other sources of advice to government within their various spheres of interest include the Academy of the Social Sciences in Australia, the Australian Academy of Technological Sciences, the Institution of Engineers, Australia (IEA), the Royal Australian Chemical Institute (RACI), and the Federation of Australian University Staff Associations (FAUSA). In recent years, matters of scientific and technological policy have received much discussion among such learned and professional organisations as well as in academic circles.

Intergovernmental co-ordination of research and technical services between the Commonwealth and the States is effected through bodies such as Ministerial councils. Among these are the Australian Agricultural Council, the Australian Minerals and Energy Council, the Australian Waters Resources Council, the Australian Transport Advisory Council, and the Australian Environment Council. The Councils, which are assisted by standing committees of officials, do not undertake research or the provision of services directly but in some instances provide grants or arrange contracts in support of research. The activities of these bodies are aimed principally at the achievement of economic, social or environmental goals.

Expenditure and manpower

Project SCORE

As mentioned above, comprehensive data on the resources devoted to scientific and technological activities in Australia are not available. Therefore, though some details of Australian expenditure on research and development activities are given below, it should be noted that these data do not include many important scientifically or technologically based programs. Programs not covered by Project SCORE (Survey and Comparisons of Research Expenditure), some of which involve large expenditures, are those which have no research and development component; such programs include those aimed at providing scientific or technological services.

Coverage and Methodology. The first comprehensive survey of expenditure on research and development (R & D) was carried out for the 1968–69 financial year. This survey, known as Project SCORE, covered R & D expenditure and manpower in the natural and social sciences in all sectors of the Australian economy. The Project was carried out principally by means of questionnaires and, in order to provide direct comparison with other OECD countries, followed (with some exceptions) guidelines laid down by the OECD. In addition to a summary report dealing with the overall national situation, separate Project SCORE reports cover the following sectors: Commonwealth Government, Business enterprise, State Government, Higher education, and Private non-profit. A summary of the results for 1968–69 is given in Year Book No. 60, pp. 995–1005.

The results of a second survey, for the 1973–74 financial year (1974 calendar year for higher education bodies), were in press at the time of writing. The results are being published in two volumes: Volume 1 contains the reports for the Commonwealth Government, State Government, and Private non-profit Sectors, while Volume 2 presents an all-sector summary together with the reports for the Business enterprise and Higher education sectors.

For the purposes of the survey, *research* was defined as original investigation directed towards increasing the general body of knowledge about, or understanding of, the subject studied. Within this category, *basic research* was taken to be original investigation of which the primary aim was more complete knowledge or understanding of the subject under study, while *applied research* was taken to be original investigation of which the primary aim was the solution of a recognised practical problem. Work was defined as *experimental development* where it involved the systematic use or adaptation of research results directed towards the production of new or improved products, processes, systems or methods. The physical, chemical, biological, earth, engineering and applied, agricultural and medical sciences were included in the natural sciences, which together with the social sciences, were covered in the 1968–69 and the 1973–74 surveys. The 1973–74 survey also covered R & D in the humanities, which were excluded in 1968–69.

Because of changes in definition and interpretation between the two surveys, the results of the 1973–74 survey will not be directly comparable with those previously published for 1968–69. However, the latter results are to be re-processed and revised figures published for purposes of comparison. The third survey is planned for the 1976–77 financial year.

All Sectors. Gross expenditure on R & D performed in Australia (GERD) in 1973–74 was $651 million, of which $594 million (91 per cent) was spent in the natural sciences, engineering and technology; and $56 million (9 per cent) was spent on research in the social sciences and humanities. Expenditure and manpower according to sector of performance were as follows.

Sector of performance	*Expenditure*		*Manpower*	
	$ million	per cent	f.t.e.(*a*)	per cent
Business enterprise . . .	228	35	14,710	28
Commonwealth Government .	202	31	14,516	27
Higher education . . .	142	22	17,111	32
State Government . . .	73	11	6,382	12
Private non-profit . . .	6	1	578	1
	651	**100**	**53,296**	**100**

(*a*) Full-time equivalent.

The following tables contain figures for expenditure on R & D in 1973–74 according to source and sector of performance and for both expenditure and manpower according to major objectives

INTRAMURAL EXPENDITURE ON R&D IN AUSTRALIA IN 1973-74 BY SECTOR OF PERFORMANCE AND SECTOR OF SOURCE OF FUNDS
($'000)

	Sector of source						
Sector of performance	*Commonwealth Government*	*State Government*	*Private non-profit*	*Business enterprise*	*Higher education*	*Overseas*	*Total*
Commonwealth Government	179,485	242	231	12,370	4	9,228	201,560
State Government	8,819	63,013	167	1,335	6	154	73,494
Private non-profit	1,866	440	2,685	371	24	547	5,933
Business enterprise	(*a*)20,609	(*b*)	. .	206,459	. .	968	228,036
Higher education	133,926	1,310	4,189	1,632	. .	607	141,664
Total	344,705	65,006	7,272	222,166	34	11,504	650,687

(*a*) Includes a small State Government contribution. (*b*) *See* footnote (*a*).

INTRAMURAL EXPENDITURE AND MANPOWER DEVOTED TO R&D IN AUSTRALIA IN 1973-74, BY OBJECTIVE SUB-GROUP

	Natural Sciences				*Social Sciences and Humanities*			
	Expenditure		*Manpower*		*Expenditure*		*Manpower*	
Objective sub-group	$'000	per cent	fte(*b*)	per cent	$'000	per cent	fte(*b*)	per cent
Business Enterprise(*a*)	228,036	38.4	14,710	31.6	. .	. .	. .	. .
Other Sectors—								
Defence	55,962	9.4	5,093	11.0	525	0.9	43	0.6
Primary industry	83,609	14.1	6,737	14.5	2,858	5.1	233	3.4
Secondary industry	31,273	5.3	2,279	4.9	221	0.4	18	0.3
Economic services	34,423	5.8	2,065	4.4	963	1.7	65	1.0
Other economic development	. .	. .	. .	. .	3,246	5.8	220	3.2
Health	11,501	1.9	1,063	2.3	125	0.2	13	0.2
Environment	13,145	2.2	920	2.0	. .	. .	. .	. .
Public welfare	334	0.1	26	0.1	2,966	5.3	279	4.1
Community services	6,970	1.2	450	1.0	1,699	3.0	141	2.1
Other community welfare	. .	. .	. .	. .	1,698	3.0	100	1.5
Advancement of knowledge(*c*)	129,157	21.7	13,158	28.3	41,976	74.6	5,684	83.6
Total	594,410	100.0	46,500	100.0	56,277	100.0	6,796	100.0

(*a*) Business enterprise respondents were not asked to differentiate between natural and social sciences—in this table all Business enterprise R & D has been assigned to the natural sciences. Business enterprises R & D cannot be assigned unambiguously to objective sub-groups because the survey classification was by industry rather than by objective (*b*) Full-time equivalents. (*c*) All R & D in the Higher educations sector was assigned to Advancement of knowledge.

When the published figures are adjusted to allow for the differences between the 1968–69 and 1973–74 surveys it can be seen that there was an increase in R & D expenditure in all sectors over the five year period. Overall, the ratio of R & D expenditure to the GDP was maintained. [(GERD/GDP for 1973–74)/(GERD/GDP for 1968–69) = 1.05].

A comprehensive survey of manpower in Australia was made in conjunction with the 1971 national census. This revealed that scientific and technical personnel, comprising the occupational classifications of architects engineers and surveyors, chemists, physicists, geologists and other physical scientists; biologists, veterinarians, agronomists and related scientists, draftsmen and technicians, accounted for 1.7 per cent of the workforce. Furthermore, 0.8 per cent of the Australian population held tertiary qualifications in the physical sciences and technology and 2.5 per cent held technical qualifications. The distribution of educational attainment of the population in 1971, over major fields of scientific and technical personnel was as follows. Medical, dental, health and paramedical personnel have been excluded because of inability to separate between practitioners and research staff. This group comprised 52,859 persons; 26,605 of these had at least first degrees.

Field	Persons holding degrees or equivalent	Persons with tertiary qualifications (excluding degrees)	Persons at technical level
Natural sciences	25,593	5,302	4,465
Engineering, building technology	23,152	33,866	93,092
Architecture	2,992	3,687	..
Agriculture and forestry	7,281	2,151	20,369
Total	**59,018**	**45,006**	**117,926**

Details of the distribution of expenditure in 1973–74 between basic research, applied research and experimental development are as follows:

DISTRIBUTION OF R&D EXPENDITURE BY TYPE OF ACTIVITY AND SECTOR OF PERFORMANCE
(Per cent)

	Business enterprise sector	Commonwealth government sector	State government sector	Higher education sector	Private non-profit sector	Total
Basic research	10	24	8	73	57	28
Applied research	22	52	68	23	37	37
Experimental development	69	24	25	4	6	35
Total	100	100	100	100	100	100

Commonwealth Government Sector. Within the Commonwealth Government sector, total intramural expenditure on R & D was $202 million, representing 0.40 per cent of Australia's 1973–74 Gross Domestic Product ($50,557 million) and 1.6 per cent of Commonwealth Government outlays for 1973–74 ($12,499 million). Manpower involved in this R & D effort was equivalent to 14,516 man-years, representing 0.25 per cent of the effort of the Australian workforce (5,867,700). Of this effort about 5,000 man-years were attributed to workers who held professional qualifications. Distribution of this expenditure and manpower effort by objectives and field of science is shown in Plates 63 and 64, pages 992 and 993. Other major features were:

(*a*) Socio-economic objective groups accounted for the intramural R & D expenditure of the Commonwealth Government as follows:

	per cent
Economic development	47
National security	28
Advancement of knowledge	14
Community welfare	11

(*b*) Expenditure in the Economic development group was distributed between the following sub-groups:

	per cent
Primary industry	19
Secondary industry	13
Economic services	13
Other	2

(*c*) Two respondents, CSIRO and the then Department of Supply, accounted for 68 per cent of the total intramural expenditure.

(*d*) Intramural expenditure on R & D in the natural sciences and in the social sciences and humanities was distributed as follows:

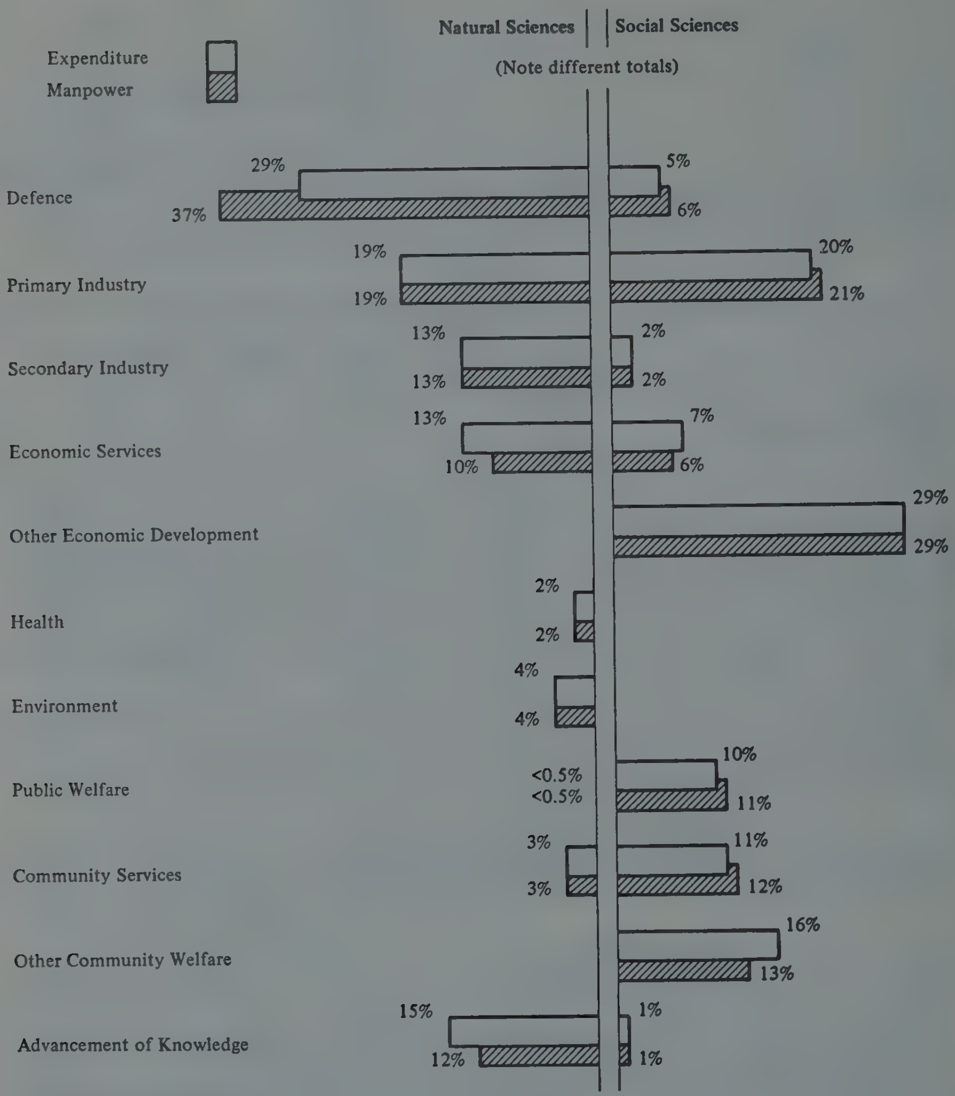
	per cent
Natural sciences	95
Social sciences	5

(No expenditure was reported for R & D in the humanities.)

42 per cent of the total effort was in Engineering and Applied Sciences, the dominant major field of science in the natural sciences.

A diagrammatic representation of the principal ways in which Commonwealth Government support is channelled into R & D is shown in Plate 65, page 994.

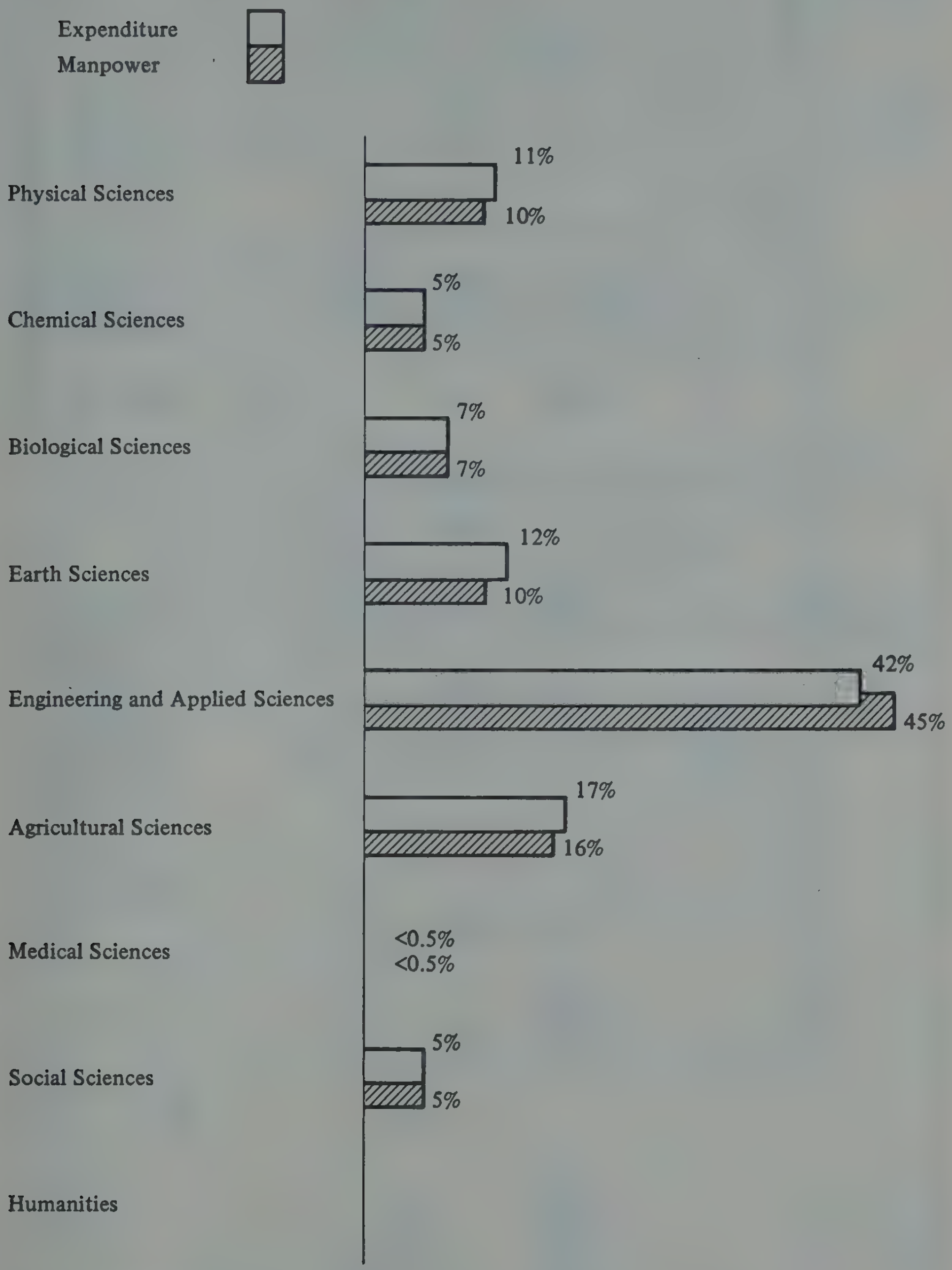
DISTRIBUTIONS OF EXPENDITURE AND MANPOWER IN THE COMMONWEALTH GOVERNMENT SECTOR BY OBJECTIVE SUB-GROUP



	Natural Sciences	Social Sciences
Total Expenditure ($'000)	190 705	10 856
Total Manpower (f.t.e.)	13 761	754

PLATE 63

DISTRIBUTIONS OF EXPENDITURE AND MANPOWER IN THE COMMONWEALTH GOVERNMENT SECTOR BY MAJOR FIELD OF SCIENCE

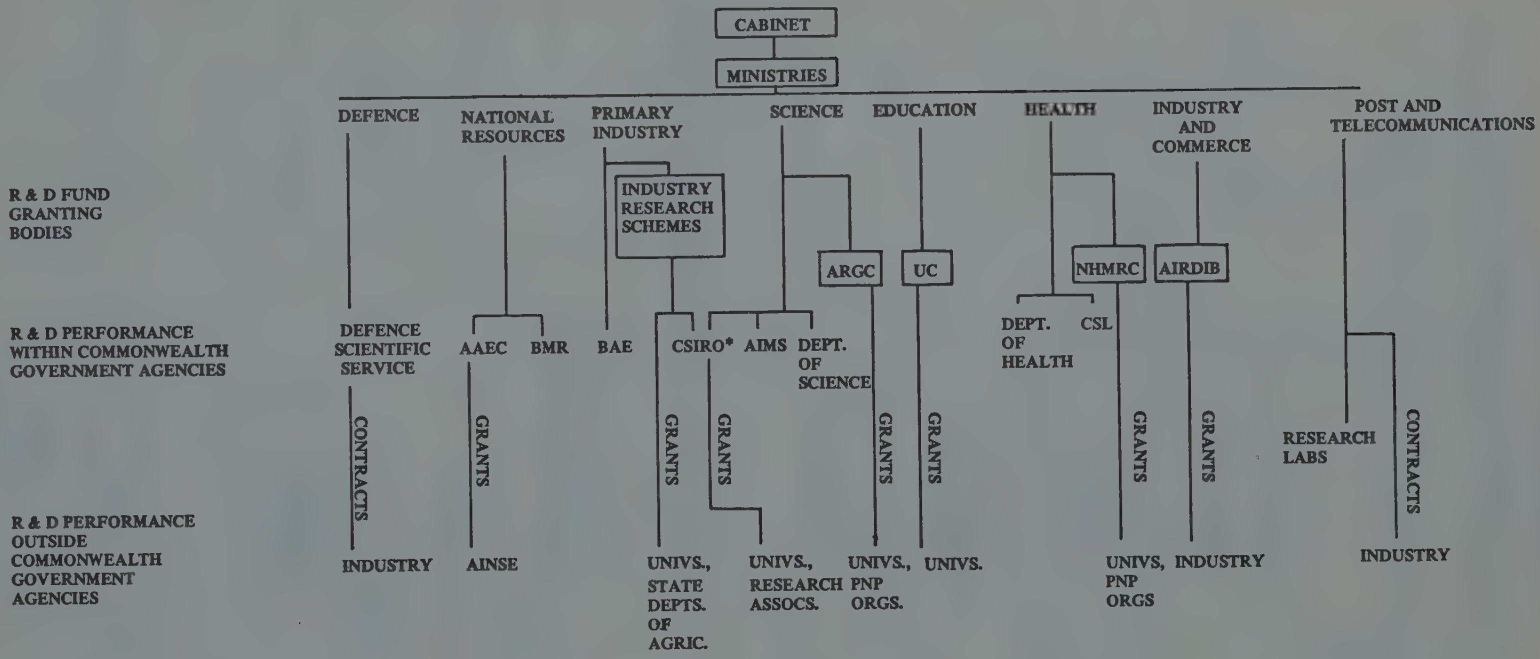


Total Expenditure ($'000) 201 561

Total Manpower (f.t.e.) 14 516

PLATE 64

IMPORTANT CHANNELS OF COMMONWEALTH GOVERNMENT FINANCIAL SUPPORT FOR R & D


CABINET
MINISTRIES
DEFENCE
NATIONAL RESOURCES
PRIMARY INDUSTRY
SCIENCE
EDUCATION
HEALTH
INDUSTRY AND COMMERCE
POST AND TELECOMMUNICATIONS
R & D FUND GRANTING BODIES
INDUSTRY RESEARCH SCHEMES
ARGC
UC
NHMRC
AIRDIB
R & D PERFORMANCE WITHIN COMMONWEALTH GOVERNMENT AGENCIES
DEFENCE SCIENTIFIC SERVICE
AAEC
BMR
BAE
CSIRO*
AIMS
DEPT. OF SCIENCE
DEPT. OF HEALTH
CSL
RESEARCH LABS
CONTRACTS
GRANTS
GRANTS
GRANTS
GRANTS
GRANTS
GRANTS
GRANTS
CONTRACTS
R & D PERFORMANCE OUTSIDE COMMONWEALTH GOVERNMENT AGENCIES
INDUSTRY
AINSE
UNIVS., STATE DEPTS. OF AGRIC.
UNIVS., RESEARCH ASSOCS.
UNIVS., PNP ORGS.
UNIVS.
UNIVS, PNP ORGS
INDUSTRY
INDUSTRY

*CSIRO is located within Ministry of Science

ABBREVIATIONS USED :

AAEC	Australian Atomic Energy Commission
AIMS	Australian Institute of Marine Science
AINSE	Australian Institute of Nuclear Science and Engineering
AIRDIB	Australian Industrial Research & Development Incentives Board
ARGC	Australian Research Grants Committee
UC	Universities Commission
BMR	Bureau of Mineral Resources
BAE	Bureau of Agricultural Economics
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSL	Commonwealth Serum Laboratories
NHMRC	National Health and Medical Research Council
PNP Orgs.	Private Non-Profit Organisations

PLATE 65

State Government Sector. Within the State Government sector the overall intramural expenditure on R & D was $73 million, representing 0.15 per cent of Australia's 1973–74 Gross Domestic Product and 1.0 per cent of State Government outlays ($7,308 million). Manpower involved in this R & D effort was 6,382 man-years, representing 0.11 per cent of the effort of the Australian workforce. Of this effort, about 2,700 man-years were attributed to workers holding professional qualifications. Distribution of this expenditure and manpower effort by objectives and field of science is shown in Plates 64 and 65, pages 996 and 997. Other major features were:

Within socio-economic objectives, Economic development accounted for 84 per cent of intramural R & D expenditure. The remaining expenditure was distributed between Community welfare (14 per cent) and Advancement of knowledge (2 per cent). Expenditure in the Economic Development Group was distributed between sub-groups as follows:

	per cent
Primary industry	64
Economic services	12
Secondary industry	8

Expenditure in the Primary Industry Sub-Group was distributed between the objectives:

	per cent
Agriculture	56
Forestry	5
Fisheries	3

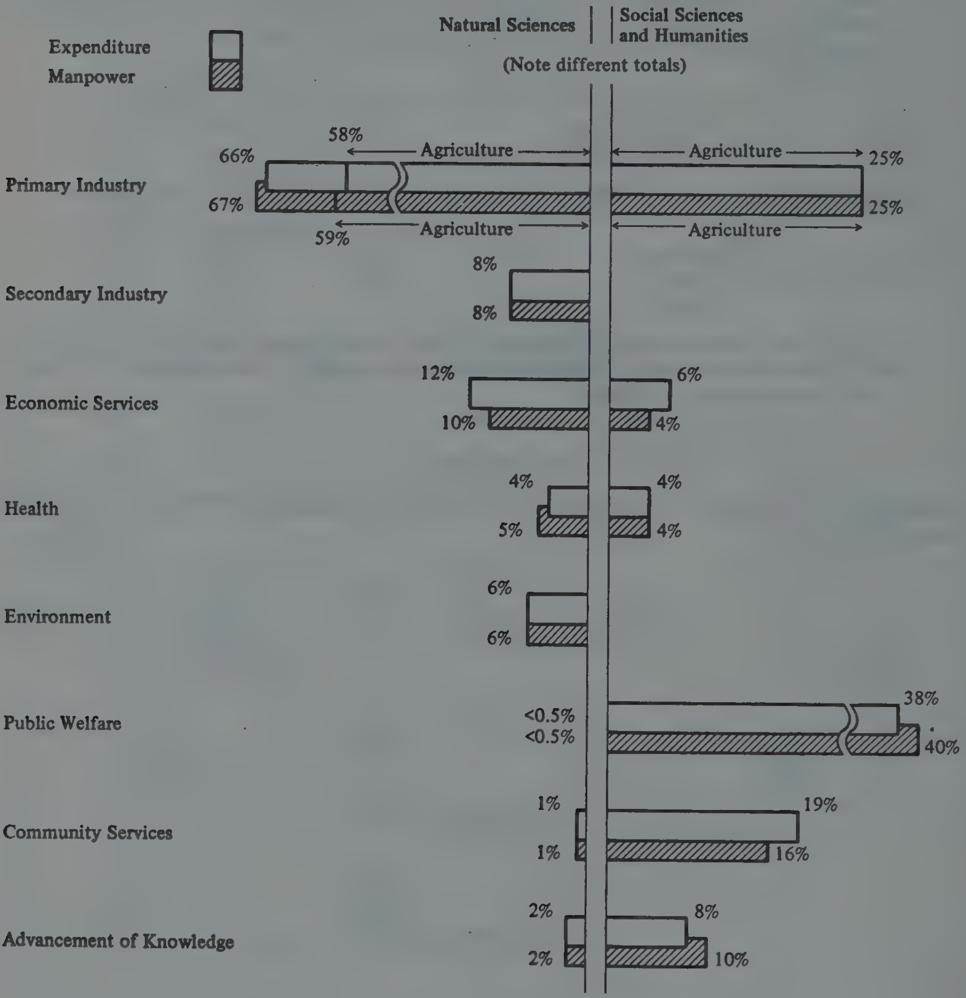
In every State, the Department of Agriculture was by far the largest performer of R & D.

Intramural expenditure on R & D in the natural sciences and in the social sciences and humanities was distributed as follows:

	per cent
Natural sciences	96
Social sciences and humanities	4

60 per cent of the total effort was in Agricultural sciences, the major field of science in the natural sciences.

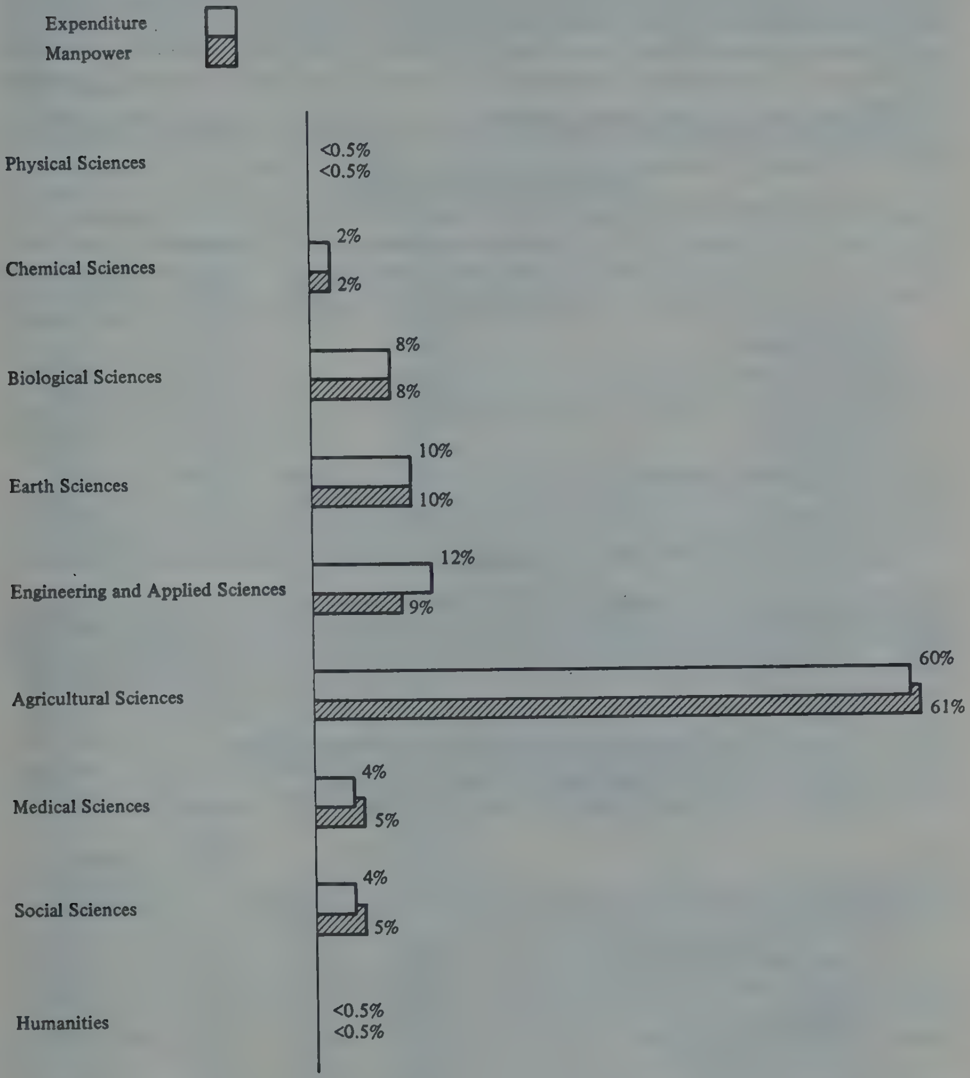
DISTRIBUTIONS OF EXPENDITURE AND MANPOWER IN THE STATE GOVERMENT SECTOR BY OBJECTIVE SUB-GROUP



	Natural Sciences	Social Sciences and Humanities
Total Expenditure ($'000)	70 603	2 891
Total Manpower (f.t.e.)	6 075	307

PLATE 66

DISTRIBUTIONS OF EXPENDITURE AND MANPOWER IN THE STATE GOVERNMENT SECTOR BY MAJOR FIELD OF SCIENCE



Total Expenditure ($'000)	73 494
Total Manpower (f.t.e.)	6 382

PLATE 67

Private non-profit sector. In this sector the intramural expenditure on R & D of $5.9 million represented only 0.01 per cent of Australia's 1973–74 Gross Domestic Product. The manpower involved in this effort was 578 man-years of which about 310 man-years were attributed to workers who held professional qualifications. Within socio-economic objectives, the Community welfare group accounted for 98 per cent of R & D expenditure. Within this sector almost 75 per cent of R & D was performed by ten medical research institutes.

Higher education sector. The gross intramural expenditure on R & D in this sector was $142 million, consisting of $61 million directly spent on research in the universities, together with an estimated value of $80 million for R & D performed in combined teaching and research activities. Colleges of Advanced Education accounted for the remaining $1 million. The gross intramural expenditure of $142 million represented 0.28 per cent of Australia's 1973–74 GDP. The manpower involved in this effort was 17,111 man-years representing 0.29 per cent of the total effort of the Australian workforce.

An analysis of expenditure and manpower effort according to field of science is shown in the following table.

HIGHER EDUCATION SECTOR

	Expenditure		*Manpower*	
	$'000	per cent	f.t.e.(*a*)	per cent
Physical sciences	19,597	14	2,010	12
Chemical sciences	11,187	8	1,391	8
Biological sciences	23,397	17	2,639	15
Earth sciences	6,099	4	694	4
Engineering	14,836	10	1,918	11
Medical sciences	14,887	11	1,497	9
Agricultural	10,023	7	1,313	8
Social science and humanities	41,638	29	5,648	33
Total	**141,664**	**100**	**17,111**	**100**

(*a*) Full-time equivalent.

Business enterprise sector. The gross intramural expenditure on R & D in the business enterprise sector was $228 million, representing 0.45 per cent of Australia's 1973–74 GDP. The manpower involved in this effort was 14,710 man-years, representing 0.25 per cent of the total effort of the Australian workforce. Figures for expenditure and manpower effort according to industry are shown in the following table.

INTRAMURAL EXPENDITURE AND MANPOWER DEVOTED TO R & D IN AUSTRALIA IN 1973-74
BUSINESS ENTERPRISE SECTOR

	Expenditure		*Manpower*	
Industry	$'000	per cent	f.t.e.	per cent
Manufacturing—				
Food, beverages and tobacco	9,901	4.3	800	5.4
Textiles, clothing, footwear	3,877	1.7	270	1.8
Paper and printing	2,420	1.1	170	1.2
Chemicals	19,525	8.6	1,740	11.8
Pharmaceuticals	8,138	3.6	240	1.6
Basic metal products	14,621	6.4	990	6.7
Transport equipment	53,044	23.3	2,530	17.2
Fabricated metal products	55,605	24.4	4,800	32.6
Other manufacturing	15,610	6.8	960	6.5
Total manufacturing	182,741	80.1	12,500	85.0
Other industries	45,295	19.9	2,210	15.0
Total all industries	**228,036**	**100.0**	**14,710**	**100.0**

Resources and services

Although power to regulate the development and utilisation of Australia's natural resources rests largely with the States, the Commonwealth Government, in part because of its jurisdiction in the control of Australia's overseas trade, also plays an important role. Extensive machinery exists for consultation and collaboration between the Commonwealth and State governments in relation to the development and management of natural resources.

Several important resources and services are dealt with elsewhere in this Year Book and are thus not included in this chapter. These include Transport (Chapter 12), Communications (Chapter 12), Health (Chapter 14), Agriculture (Chapter 22), Water (Chapter 23), Forestry (Chapter 24), Fisheries (Chapter 25) and Minerals and Energy (Chapters 26, 27).

Soil resources

Since 1938 all State Governments, except Tasmania, have enacted legislation relating to the mitigation of erosion and the conservation of soil resources. The States of New South Wales and Victoria have set up organisations to deal specifically with the problem of soil conservation whilst, in other States, departments of agriculture discharge that function.

A Standing Committee on Soil Conservation was established in 1946. It comprises the heads of soil conservation bodies in the States and representatives of relevant Commonwealth agencies. The Committee co-ordinates activities of interest to its member bodies such as the survey of erosion throughout Australia which was carried out in the late 1960s, and the development of co-operative arrangements for in-service training of technical personnel.

Fauna and flora resources

Responsibility for the conservation and management of fauna and flora resources rests, in the main, with the State Governments. The Commonwealth, however, has responsibility for such resources in its own Territories.

During the last century, as each State became established, museums and botanical gardens containing herbaria were set up. Studies of fauna and flora were carried out by these bodies and by the universities. Since the establishment of CSIRO, various divisions of the Organization have also carried out work on fauna and flora but an important part of total Australian research into biological resources continues to be undertaken in the museums and herbaria of the State Governments.

In 1975, the Commonwealth Government established a National Parks and Wildlife Commission and Service whose functions include care and management of national parks and wildlife in Australia and its Territories, conduct of ecological studies to determine additional areas which should be reserved as national parks and nature reserves, and survey and assessment of wildlife populations with particular reference to endangered species.

The Commonwealth has also made funds available, through the Australian Biological Resources Study Interim Council, to stimulate taxonomic and ecological studies of Australian fauna and flora resources. Funds were also provided towards the establishment of biological resources data centres which are to enable the storage and retrieval of biological data on a national basis. Planning of longer term national botanical and zoological studies has been commenced.

Environmental protection

Responsibility for most aspects of environmental protection rests with the State Governments, and all of these have enacted legislation to regulate those operations of governmental and private enterprises that may have a deleterious effect on the physical environment.

The Commonwealth Government has responsibility for environmental protection in its own Territories, in respect to the operations of its own agencies within the States, and in relation to projects or activities carried out by other authorities with the aid of Commonwealth funds. It is also concerned with the enforcement of provisions of relevant international conventions to which Australia is a signatory.

The various governments collaborate in environmental and conservation matters through three Ministerial Councils:

- the Australian Environment Council, which provides a framework for consultation on environmental matters;
- the Council of Nature Conservation Ministers, which is concerned with preservation of wildlife and the establishment and management of national parks;
- the Australian Water Resources Council, which is concerned with the assessment development and use of national water resources.

Each government has designated ministers who are concerned with the administration of broad policies for environmental protection. In some cases, governments have implemented policies requiring the provision for public scrutiny of environmental impact statements as a prerequisite to approval of new development projects or activities with significant environmental consequences.

A Bureau of Environmental Studies within the Department of Environment, Housing and Community Development is charged with reviewing requirements for environmental research, assessing the extent to which such requirements are being satisfied through programs of various agencies, and promoting or directly undertaking research needed to fill gaps in the overall program .

Meteorology

The Bureau of Meteorology, which is a Division of the Department of Science, is the national authority for providing weather forecasting and warning services, and general meteorogical information and consultative advice. Users of these services include the general public, defence forces, civil aviation and marine authorities, and specialist groups in primary and secondary industries.

Programs of research are carried out in support of these services, often in co-operation with other institutions concerned with meteorological science, including universities and the Environmental Physics Research Laboratories of the CSIRO. The Australian Numerical Meteorology Research Centre, which specialises in the development of numerical model techniques for predicting atmospheric behaviour, is operated jointly by the Bureau of Meteorology and the CSIRO.

At June 1975, the Bureau had a staff establishment of approximately 2,000, including about 450 professionals. In addition, a large number of persons assist part-time in maintaining the Bureau's extensive observational network.

Total expenditure in 1974–75 was approximately $31.2 million. About 62.5 per cent of funds was provided by the Commonwealth Government through direct appropriation, while all but a small portion of the balance came from charges made to other Commonwealth agencies, principally for meteorological services in support of civil and defence aviation activities.

Ionospheric Prediction Service

The Ionospheric Prediction Service Branch of the Department of Science (IPS) exists to assist users of radio communications to achieve the most effective and efficient use of radio transmissions that are influenced by or dependent on the ionosphere. The staff of the Branch make regular measurements of the ionosphere above Australia and its territories and of the sun, and issue both short and long term predictions of the state of the ionosphere as it applies to radio communication.

Research into physical phenomena affecting the condition of the ionosphere forms part of the regular activity of the IPS.

Scientific and technological information services

Information services for scientists and technologists are provided through National and State libraries, and through libraries operated by scientific and technological agencies of the Commonwealth and State Governments, by tertiary education institutions, and by industrial organisations. In 1973, a Committee of inquiry recommended, inter alia, that the Commonwealth Government establish a national scientific and technological information (STI) authority to advise on the development of a national STI policy, and to promote the orderly development of scientific and technological library and information services in Australia. Three national subject libraries are now being established by the National Library of Australia: the Australian National Scientific and Technological Library (ANSTEL) which was officially opened in 1975; the Australian National Social Sciences Library (ANSOL); and the Australian National Humanities and Arts Library (ANHUL). Other major sources of STI within Australia are CSIRO's Central Information Library and Editorial Section (CILES) and the Australian Manufacturing Technology Information System (AMTIS) which is being established within the Commonwealth Government Department of Industry and Commerce.

Major government research agencies

The Commonwealth Scientific and Industrial Research Organisation (CSIRO)

The CSIRO is the largest scientific research organisation in Australia. It is a statutory body established in 1949 to replace the former Council for Scientific and Industrial Research (CSIR).

The main function of the CSIRO is to carry out scientific research and investigations in connection with Australia's primary and secondary industries. The CSIRO has at present 37 research Divisions and 6 smaller research Units, a number of them being linked together in laboratory groups. The wide range of their activities is illustrated by the following table.

GENERAL DISTRIBUTION OF RESEARCH EFFORT IN CSIRO
(In terms of non-capital expenditure for 1974–75)

Field	*Divisions and units*	*$ million*	*Per cent*
Crops and pastures	Agro-industrial Research Horticultural Research Irrigation Research Plant Industry Tropical Agronomy	12.5	13.9
Livestock	Animal Genetics Animal Health Animal Physiology Nutritional Biochemistry	12.4	13.8
Land use	Land Resources Management Land Use Research Soils	8.2	9.1
Insects and wildlife	Entomology Wildlife Research	7.0	7.7
Marine science	Fisheries and Oceanography Marine Biochemistry	3.9	4.3
Environmental physics	Atmospheric Physics Cloud Physics Environmental Mechanics	2.9	3.2
Wool processing and textiles	Protein Chemistry Textile Industry Textile Physics	6.2	6.9
Food	Food Research Wheat Research	5.1	5.6
Mineral exploration, processing and properties	Chemical Engineering Minerology Mineral Chemistry Mineral Physics	7.7	8.5
National standards	National Measurement Laboratory	5.2	5.8
Chemical and physical research industrial interest	Applied Organic Chemistry Chemical Physics Chemical Technology Tribophysics	7.3	8.0
Engineering and construction	Applied Geomechanics Building Research Mechanical Engineering Solar Energy Studies	6.9	7.6
Radiophysics	Radiophysics	3.0	3.3
Computing and statistics	Computing Research Mathematics and Statistics	2.1	2.3

The powers and functions of the CSIRO are prescribed in the *Science and Industry Research Act 1949* under which the Organisation operates. In brief these are as follows:

to carry out scientific research and investigations in connection with Australian primary and secondary industries or any other matter referred to it by the Minister for Science,
to train scientific research workers, and award studentships,
to make grants in aid of scientific research,
to recognise and support research associations,
to maintain national standards of measurement,
to disseminate scientific and technical information,
to publish scientific and technical reports, and
to liaise with other countries in matters of scientific research.

The CSIRO has a total staff of about 7,000 persons located in more than 100 laboratories and field stations throughout Australia. About one-third of the staff are professional scientists.

In 1974–75, the CSIRO operations cost approximately $105 million, more than 80 per cent of which was met by the Commonwealth Government through direct appropriation. Of the remainder, about four-fifths was spent on research concerned with various primary industries and came from statutory trust funds most of which derived from levies on production, and a supplementary contribution by the Commonwealth Government. The balance of operating expenses, comprising less than 4 per cent of the total, came from individual companies, other Commonwealth agencies, overseas instrumentalities and private foundations.

The Australian Atomic Energy Commission (AAEC)

The AAEC was established by the Commonwealth Parliament under the *Atomic Energy Act 1953* as a statutory body whose main functions are to facilitate the development of Australia's resources and the utilisation of various forms of nuclear energy within the Australian economy.

Moving in its earliest days towards the planning and construction of a nuclear research establishment at Lucas Heights near Sydney. the Commission arranged for a nucleus of scientists and engineers to obtain training and experience through overseas attachments, mainly in the United Kingdom. By the late 1950s an R & D program had been initiated at its research establishment.

The AAEC's activities are controlled by a Commission which is responsible to the Minister for National Resources. The Atomic Energy Act provides for the Commission to consist of five Commissioners including a Chairman.

The Commission's current program places emphasis in the following areas.

Nuclear power. The assessment of the potential contribution and the total implications of nuclear power in the co-ordinated development of Australia's energy resources.

Safety and the environment. The establishment of adequate arrangements for safety assessment, licensing and regulation of all nuclear facilities including those for the long-term management and disposal of radioactive wastes, in order to control potential hazards to health and the environment.

Uranium and nuclear fuels. The development of uranium resources, consideration of the desirable extent and timing of uranium processing including enrichment, and the development of a technical base on which Australia could establish its own uranium enrichment technology.

Radioisotopes and radiation. To continue to meet the expanding requirements for radioisotopes, particularly in medicine, and further to explore the benefits to be achieved by the application of radioisotopes and radiation in industry.

International relations. To assist in matters arising from Australia's membership of the International Atomic Energy Agency and the OECD-Nuclear Energy Agency and in matters arising from Australia being a party to the Treaty on the Non-Proliferation of Nuclear Weapons.

At June 1975 the Commission employed 1,304 staff of whom 370 were professional. For the year 1974–75 total expenditure was about $18.0 million of which $16.6 million was spent on research.

The AAEC participates in the activities of the Australian Institute of Nuclear Science and Engineering. The Institute, which has a corporate membership comprising the Commission and the Australian universities, is concerned with the awarding of studentships, fellowships and research grants, with the organising of conferences and with arranging the use of AAEC facilities by postgraduate students.

The Antarctic Division, Department of Science

Australia has been active in research and exploration in the Antarctic region since early in the present century, but the overall effort has expanded appreciably since the 1940s when the Government established the Australian National Antarctic Research Expeditions (ANARE) and the Antarctic Research Division.

Services provided by the Division in relation to research expeditions include:

the establishment and maintenance of three permanent multi-disciplinary stations on the Antarctic continent and one on sub-Antarctic Macquarie Island;

the mounting of annual and shorter term research expeditions;

the co-ordination of activities of agencies involved with ANARE; the Antarctic Division itself, the Bureau of Meteorology and the Ionospheric Prediction Service of the Department of Science; the Bureau of Mineral Resources, Geology and Geophysics, and the Division of National Mapping of the Department of National Resources; certain sections of the Army; various university departments; and the CSIRO.

In addition to its general support function, the Division directly undertakes research in such fields as cosmic ray and upper atmosphere physics, glaciology, Antarctic biology and medical science matters relevant to Antarctic conditions. Personnel at research stations include meteorologists, physicists, glaciologists, biologists and logistic staff.

At any given time the total staff complement of the Division varies between 160 and 190 persons about half of whom are engaged on a short-term basis to man annual expeditions and provide general support. The permanent staff includes about 15 scientists. Expenditure by the Division in 1974–75 was approximately $4.5 million.

Australia is a signatory to the Antarctic Treaty, and many of its scientific activities in Antarctica are undertaken in collaboration with other signatory countries.

Australian Institute of Marine Science (AIMS)

The Australian Institute of Marine Science is being established on a 190 hectare site within a national park at Cape Ferguson, 50 kilometres south of Townsville. A 5,600 square metre laboratory complex and research vessel harbour are to be constructed. In the interim, temporary accommodation at Cape Pallarenda, just north of Townsville, is being used by research groups.

The Institute is mainly concerned with research and will emphasise multi-disciplinary projects focused on tropical marine sciences. Research projects at AIMS fall into four main areas: marine food webs; reef-building organisms and coral reefs; tropical oceanography; and marine pollution. These areas were selected both for their current importance to marine science and for their relevance to many applied problems. Specific programs being undertaken by the Institute concern: inshore productivity; plankton behaviour; ultraplankton; coral taxonomy; coral calcification; reef diagenesis; oceanographic mixing processes as related to cycling and budgets of plant nutrients; and pollution studies of trace metals.

Defence science

Much of the research and development effort conducted by the Commonwealth Government falls into this category. A fuller coverage may be found in Chapter 4, Defence.

Research in industry

Contrary to the situation in most industrialised countries, a smaller proportion of the overall R & D effort in Australia is undertaken in private industry than in government agencies. However, while precise statistics are not available, industry's percentage contribution to total R & D performance is believed to have increased in the period since 1964–65, partly under the stimulus of the grants scheme introduced by the Commonwealth Government with the aim of encouraging private business enterprises to increase the levels of their expenditure on industrial research and development (I R & D).

The Commonwealth Government has encouraged technological innovation by industry directly through financial incentives and indirectly through patent legislation, taxation and educational measures which provide a favourable economic climate for such innovation. In recent years the principal avenue of direct assistance has been the Industrial Research and Development Grants Scheme.

In 1974–75, some 1,400 firms applied for grants under the Grants Scheme. From the Scheme's inception in 1967 up to June 1975, $91 million was disbursed. Grants received by firms are taxable, hence the net incentive to industrial R & D is rather less than the above figures imply. The broad industry groups that have benefitted principally under the Scheme are basic metal products, industrial machinery and equipment, electric and electronic apparatus, transport equipment and chemicals. Following a review by the Government, the Scheme was revised in 1976 so as to operate in a more cost effective manner. The new Scheme, now known as the Industrial Research and Development Incentives Scheme, commenced operation in the 1976–77 financial year.

Other fields of activity which to some extent involve the adoption by industry of new technology, and which attract financial support from the Commonwealth, include industrial design and product standardisation. The Industrial Design Council of Australia and the Standards Association of Australia received subsidies from the Government of $340,000 and $850,000 respectively in 1973–74.

Metric conversion

Related to product standardisation is the conversion to the metric (SI) system of weights and measures which is now well advanced in Australia. The conversion program has been developed and implemented under the guidance of a Metric Conversion Board established by the Commonwealth Government. The Board estimates that the program is now about 70 per cent complete and envisages that it will be substantially completed by 1980. Because implementation of the program depends in large measure on general community co-operation, the Board has been assisted by advisory groups representative of all sectors of the community.

Industry organisations

A number of organisations aiming, wholly or in part, to support and encourage R & D have been established within industry. Some have largely sectional interests, such as the Australian Engineering and Building Industries Research Association, the Australian Mineral Industries Research Association, and the Bread Research Institute.

Organisations with broader interests and roles include the following.

The Australian Industrial Research Group (AIRG). This is an association, founded some ten years ago, of managers of research and development employed in Australian industry. Its members, numbering about 50, control most of the R & D expenditure in Australian industry. Objectives of the Group are to improve the quality of research management in Australia and to stimulate and develop an understanding of research as a force in economic, industrial and social activities. The Group's activities have included conduct of a survey of R & D expenditure by Australian industry, sponsorship of studies into science education and the electronics industry, and provision of advice on desirable amendments to the Industrial Research and Development Grants Act.

The National Association of Testing Authorities (NATA). This Association was established in 1947 at the direction of the Commonwealth Government. NATA is the recognised body for the registration as testing authorities of both government and industrial laboratories within a wide area of science and technology. Laboratories receive registration only after careful assessment to ensure that they meet the required standards. At June 1973 the Association had registered 925 laboratories including 697 in industry, 190 in Commonwealth and State government establishments and 38 in educational institutions.

The Standards Association of Australia (SAA). This Association was founded in 1922 to publish and promote the adoption of Australian standards. Standards are prepared only after a full inquiry has shown that the project is a desirable one and worth the effort involved. Work is based on voluntary agreement and recognition of the community of interest of producer and consumer.

The Industrial Design Council of Australia. This Council is a voluntary association of leading industrialists, academics and other professionals whose aim is to accord design appropriate status in the production process. In particular the Council aims to improve productivity, sales and profits, and to promote a healthy, vigorous manufacturing industry which will in turn contribute to the economic and cultural welfare of the nation. The Council is also concerned to promote a wider understanding of industrial design, and the development of a strong profession in Australia through, among other things, appropriate education for industrial designers.

The Productivity Group Movement. Productivity Groups have been established throughout the country with the object of improving productivity and efficiency by exchanging ideas, reviewing experience and by discussion of the practical problems of group members. The Department of Employment and Industrial Relations promotes and actively participates in the productivity group movement. In 1973 there were some 250 groups comprising over 5,700 member undertakings.

The Industrial Research Institute of South Australia Incorporated. This Institute was established by the Government of South Australia in 1971 with the aim of promoting and co-ordinating industrial research activities within that State. The Institute offers advisory services to individual companies in relation to their research needs, and maintains various information services to South Australian industry generally. Industry, research organisations, and the universities in South Australia, along with the South Australian Institute of Technology, are represented on the governing Council.

The Australian Innovation Corporation Limited (AICL). Some 40 Australian companies are shareholders in this Corporation which was established in 1970. It provides both advice and funds to assist in the promotion and commercialisation of local research, invention and development.

The National Small Business Bureau. This Bureau, established by the Commonwealth Government, has primarily a research and co-ordination role in relation to national and State assistance to small business. This includes the bringing together of special expertise in business management, industrial technology, industrial relations and other subjects relevant to promoting the efficient development of small business.

Research in universities and colleges

University research is financed from four main sources:

- general recurrent funds recommended by the Universities Commission;
- special grants for research recommended by the Commission;
- grants from other Government sources, particularly the Australian Research Grants Committee (ARGC) and the National Health and Medical Research Council (NH & MRC); and
- grants, contracts and donations from private sources.

In 1973, research expenditure in Australian universities totalled some $49.5 million (excluding salaries and wages). Of this sum, $2.3 million was provided through the NH & MRC and $5.4 million through the ARGC. The latter Committee assesses proposals in the social sciences and humanities, in physics, chemistry, biology, earth sciences, engineering and applied sciences. The prime criterion for support is the excellence of the proposal made. In three areas, those of upper-atmosphere research, marine science and multidisciplinary research, the Committee has sought to give special encouragement. Over the 1973–75 triennium, particular sums were "earmarked" for grants in these fields. In all other areas grants have been made without regard to the distribution of funds between the different areas.

Colleges of Advanced Education do not maintain expensive research facilities or programs akin to those of the universities. Staff are nevertheless encouraged to undertake research to the extent that this is possible. Research of an applied nature, and associated consultancy services to industry and commerce, are expected to become increasingly prominent within the colleges.

Research organisations associated with tertiary education institutions

Several of the universities and colleges of advanced education have established independent companies, operating on a commercial basis, to promote and manage research and consultancy services to industry, commerce, government and the general community. Examples are: Unisearch Ltd of the University of New South Wales, which is the largest of these organisations, with annual income at present of about $500,000; Technisearch Ltd of the Royal Melbourne Institute of Technology; Techsearch Inc. of the South Australian Institute of Technology.

These organisations play an important role in promoting communication between the higher education and other sectors. They undertake investigational and research projects, mainly in the fields of engineering and science. However activities in other fields, such as management, marketing and the social sciences are increasing. Testing work, performed generally by full-time employees, is, undertaken in some instances. Results of work are confidential to the client and are not published unless authorised by that client.

Social science research

Research in the social sciences is undertaken primarily in universities and agencies of the Commonwealth and State governments. Financial support for research in non-government bodies, especially universities, is provided by government. This support comes both from general funds provided to the universities and also from specific granting bodies such as the Australian Research Grants Committee and the Australian Advisory Committee on Research and Development in Education.

The bulk of social science research carried out within Commonwealth Government agencies is performed as part of the general activities of various departments. However, several agencies have been established specifically to undertake research.

Studies are undertaken in such fields as:

- economic research;
- education research;
- statistical and social analysis of health and social security schemes;
- personnel management and industrial psychology, including inquiries into physical working conditions, industrial safety and the effects of technological change on employment;
- research directed at the development of standards for residential accommodation;
- research directed at the development of a system of social indicators to measure community progress in terms other than economic growth, and to determine the processes by which social goals are realised.

Agencies which have been established to undertake research in particular areas include the Australian Institute of Aboriginal Studies, the Australian Institute of Criminology, the Bureau of Agricultural Economics and the Bureau of Transport Economics.

Agencies of the various State governments undertake research relevant to their own activities and programs.

Examples of these programs are:—

- in the field of health services—studies of social determinants of morbidity, of patterns of utilisation of health services, and of the management of such services;
- in the field of youth and community services—studies of the ecology of urban deliquency, of efficiency of the system of prisoner parole, and of causes of intellectual handicap in children;
- in the field of crime research—the accumulation and interpretation of crime statistics.

A major research program into the causes of family disruption and breakdown in Australia is being supported jointly by the Commonwealth and State governments.

Exchange of ideas and information on the social sciences is promoted through a number of professional and learned bodies, of which the Australian and New Zealand Association for the Advancement of Science (ANZAAS) and the Academy of the Social Sciences in Australia are the most broadly based. In addition to encouraging the advancement of the social sciences, the Academy sponsors and organises research, subsidises publications and acts as a consultant and advisor on the social sciences.

Non-government bodies which undertake or promote research in specific fields of the social sciences include the Australian Institute of International Affairs, the Australian Institute of Urban Studies, and the Australian Institute of Political Science.

International activities

International organisations

Australia participates in the activities of both governmental and non-governmental international scientific organisations. Interaction with the former group of bodies is arranged through Commonwealth Government agencies, but participation in the activities of bodies such as the FAO, IAEA, UNESCO, WHO, WMO is not restricted to governmental scientists. To facilitate scientific liaison and representation some Government agencies have scientific and technological representation at overseas posts (e.g. Japan, United Kingdom, United States of America, USSR, IAEA, OECD). Australia also plays an active role in regional bodies such as ESCAP (formerly ECAFE), the Pacific Science Congress, and the Association for Science Co-operation in Asia (ASCA), and has provided technical assistance to countries in the region under both multilateral and bilateral arrangements.

In particular, Australia is co-operating with the endeavours of the Committee for Scientific and Technological Policy of the OECD in its programs on:

- Automated information processing and communication systems.
- Assessment of the social consequences of new and existing technologies.
- Effects of technology transfer by multinational enterprises.
- Measurement of resources (financial and manpower) devoted by OECD member countries to scientific research and development.

Participation in international non-governmental scientific bodies is arranged through learned and professional bodies. For example, the Australian Academy of Science provides representation to the International Council of Scientific Unions (ICSU) and a number of its affiliated bodies.

Studentships and fellowships

Australia has assisted other countries, principally in the Asian and Pacific regions, by training their nationals. Large numbers of such students, mainly seeking first qualifications at tertiary level, have been accommodated under schemes such as the Colombo Plan. There are also arrangements under which established scientists from overseas are assisted to undertake study and research in Australia, but there are more Australian scientists going abroad temporarily than there are foreigners entering temporarily for these purposes.

Bilateral arrangements

Various bilateral arrangements at both government and non-government levels have contributed to the development and maintenance of co-operation in science and technology between Australian institutions and scientists and those in other countries. Formal bilateral agreements solely devoted to scientific and technological co-operation have been entered into with the USA (1968), India (1975) and the Federal Republic of Germany (1976) and are administered by the Department of Science. A fourth such agreement with the USSR (1975) is administered by the Department of Foreign Affairs.

Activity under the United States/Australia agreement has reached a steady level. Support is provided for about eight specialist seminars, and between ten and twenty individual visits, each year. Where opportunities exist, other co-operative projects which depend on special facilities are supported.

None of the more recent agreements have yet reached a constant level of activity, in all cases, however, opportunities for co-operation are being actively pursued. Under the USSR/Australia agreement exchange visits by expert groups have taken place in a number of specialist fields, including earth sciences, plant industry, radio astronomy, entomology, and textile technology.

Astronomy

In the field of optical astronomy, Australia and Britain are co-operating in the Anglo-Australian telescope project which involves the operation in Australia of a 3.9 metre reflecting telescope at Siding Springs, New South Wales. The telescope, among the largest in the southern hemisphere, was officially opened in October 1974.

Observing time on the telescope is shared equally between Australia and the United Kingdom. It is expected that work with the telescope will complement the significant progress made by radio-astronomers in Australia.

Space

Agreements have been signed by the Governments of Australia and the United States of America to co-operate in the establishment and operation in Australia of space vehicle tracking stations. The agencies for the Australian and the American Governments are the Department of Science and the National Aeronautics and Space Administration (NASA) respectively.

As part of the world-wide network supporting NASA's space program the stations track spacecraft in their orbits around the earth or on their journeys into space, receive telemetered data from the spacecraft, and issue radio commands controlling the spacecraft's manoeuvres. The Department of Science is responsible for managing, staffing and operating the stations on behalf of NASA. The stations which are now in operation are at Orroral Valley, Honeysuckle Creek and Tidbinbilla in the Australian Capital Territory. For 1974–75, NASA expenditure on operations in Australia was $11.5 million.

An extensive communications system links the tracking stations with the control centres in the United States of America. At all stations the responsibility for the system is vested in a station director who is a senior officer of the Department of Science.

High altitude

The Balloon Launching Station at Mildura, Victoria, is operated by the Department of Science under a joint-sponsorship arrangement with the U.S. National Science Foundation. The station provides a service for scientific research requiring the use of high altitude balloons. These services are available to research workers from the U.S.A., Australia and other countries.

Defence

In the field of defence science, Australia collaborates with other countries through a variety of arrangements at inter-governmental level. Further information is given in Chapter 4, Defence.

Other

At the non-governmental level, formal arrangements for sciencific co-operation with counterpart institutions in other countries have been concluded by a number of Australian bodies. For example, an arrangement covering co-operation in astronomy exists between the University of Sydney and Cornell University (USA), while over a broader area The Australian National University has an arrangement with the University of Moscow which includes exchanges in the scientific fields.

CHAPTER 29

CULTURAL ACTIVITIES, RECREATION AND TRAVEL

This chapter is divided into three major sections. The culture activities section consists mainly of a description of cultural organisations and some statistical information concerning financial assistance for the arts.

The recreation section comprises descriptive information provided by the Department of Environment, Housing and Community Development and Recreation on four major aspects of leisure: community recreation, fitness, sports development, and youth affairs. Information on tourism, the fifth major aspect of leisure, is provided by the Department of Industry and Commerce. This section also includes the results of a Census of Tourist Accommodation Establishments for the year ended 30 June 1974, and quarterly accommodation surveys conducted by the Australian Bureau of Statistics.

The travel section consists mainly of statistics concerning overseas visitors to Australia and Australian residents departing overseas. There is also a short note about travel within Australia.

CULTURAL ACTIVITIES

Cultural organisations and financial assistance for the arts

In Australia the arts are given financial support on several levels. The main sources of subsidy are the Commonwealth and State governments, but support has been increasing recently from local governments and universities. Support from private sources is still limited, but inclusion of the arts in the benefits of private foundations, and sponsoring of awards and scholarships is gradually increasing. While support is received indirectly through government educational, cultural and other public service instrumentalities, three organisations have played a signficant role in serving and financing the arts.

The Arts Council of Australia

The Arts Council of Australia was founded shortly after World War II. (It should not be confused with the Australia Council mentioned later in this chapter which is a national government agency for assistance to the arts).

The Arts Council is an independent, non-government association consisting of a federation of State 'Divisions'; each Division is based on the local branches organised in country centres. With the exception of Western Australia, the Arts Council has a Division in each State and Territory and throughout Australia there are more than 160 branches. In the case of Western Australia the Arts Council co-operates closely with the recently formed Western Australian Arts Council, which is a statutory authority established by the Western Australian Government to fund and service the arts.

The Arts Council has two main objectives: to arrange tours by professional arts attractions (including performances for school audiences) to country areas; and the establishment of weekend or vacation 'schools'. Activities include arranging poetry readings; the exhibition of paintings, sculpture, crafts and prints; and the presentation of concerts, drama, opera, dance, puppetry and music for primary and secondary schools. A recent development involves week-long holiday schools for young people which cover many forms of art and craft.

Australian Elizabethan Theatre Trust

The Australian Elizabethan Theatre Trust, which was established in the mid 1950s, was originally formed to present drama, opera, ballet and puppetry throughout Australia. Full autonomy has now been accorded to most of the performing companies established by the Trust in its earlier years and only the Marionette Theatre of Australia continues to operate under Trust administration. The Trust's major functions now are to provide financial guarantees to the independent performing companies and tours; to maintain two orchestras (based in Sydney and Melbourne) to service the requirements of the Australian Opera and the Australian Ballet; to administer subscription booking systems on which both of these companies now operate; to act as entrepreneur in the touring of theatre features from overseas and Australian sources; and to provide general services in communication for theatre organisations.

The Trust receives annual grants from the Federal Government through the Australia Council and from State and local governments. Its revenue is supplemented by subscriptions from members, by donations from businesses and private individuals and by its own entrepreneurial activities.

The Australia Council

In 1968 a new Federal body, the Australian Council for the Arts, was created. It operated as an advisory agency to the Government and was responsible directly to the Prime Minister. It was originally intended to service mainly the performing arts, and also to supplement existing government bodies such as the Commonwealth Art Advisory Board and the Commonwealth Literary Fund.

In 1972 a new Council was established to bring all Commonwealth Government support for the arts under unified administration, and in January 1973 the Prime Minister announced the Government's intention to legislate to establish the Australian Council for the Arts—subsequently to be known as the Australia Council—as a statutory authority, an independent agency to carry out its policies in the arts. The Australia Council became a statutory authority in March 1975.

Within the Council framework there are six specialists Boards: Theatre (including Drama, Dance and Puppetry); Visual Arts; Music (including Opera); Literature; Crafts; and Aboriginal Arts. The Boards each consist of a maximum of seven members, except for the Aboriginal Arts Board which has a maximum of nine. The Chairman of each Board is also a member of the Council and the Boards are the main source of policy initiatives in their field.

The Council itself consists of not less than 15 and not more than 19 members, including the Board Chairmen, (see above) appointed by the Prime Minister. It is responsible to the Government for policy development in matters of common concern to all Boards, and for a program of overseas exchanges. It advises the Government on new initiatives, on overall budgetary requirements and on matters referred to it by the Prime Minister or other Ministers. It acts as a forum for discussion and co-ordinated planning between various Boards.

Federal Government grants to the Council and other funding agencies increased steadily through the first years. A marked increase occurred in 1973 and 1974.

FEDERAL GOVERNMENT APPROPRIATION TO THE AUSTRALIA COUNCIL (FORMERLY THE AUSTRALIAN COUNCIL FOR THE ARTS)
($ million)

Year	*1968–69*	*1969–70*	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*1975–76*
Grant . . .	1.67	2.85	3.85	4.50	6.55	14.00	20.00	(*a*)20.00

(*a*) Reduced by $300,000 in accordance with government budget restrictions.

In addition to the 1974–75 budget allocation of $20 million a sum of $2,235,200 was granted to cover administrative expenses. The distribution of funds between the various Boards by the Council is made on the basis of budgets prepared by the Boards in relation to the calls for funds and services anticipated, by means of consultation with the Boards to determine their individual needs.

DISTRIBUTION OF FUNDS TO BOARDS OF THE AUSTRALIAN COUNCIL FOR THE ARTS (AUSTRALIA COUNCIL) 1974-75

	$
Council programs	3,633,200
Theatre Board	5,372,500
Visual Arts Board	1,094,400
Music Board	4,228,400
Literature Board	1,591,800
Crafts Board	945,200
Film, Radio and Television Board(*a*) . .	2,189,300
Aboriginal Arts Board	945,200
Total support for the Arts	**20,000,000**

(*a*) Functions transferred to the Australian Film Commission in 1976.

Council programs include a financial responsibility for projects in which Boards have a common interest.

Some 7,600 requests for assistance were received during 1974–75, of which more than 3,000 were approved wholly or in part.

Heritage Commission

TOTAL EXPENDITURE AND APPROPRIATION, 1974-75

	Total grants paid	*Cost of special services, board meetings, etc.*	*Total expenditure*	*Total appropriation*
Council program and activities	3,146,756	408,072	3,554,828	3,633,200
Theatre Board	5,358,033	87,420	5,445,453	5,372,500
Visual Arts Board	1,050,583	43,782	1,094,365	1,094,400
Music Board	4,172,101	56,520	4,228,621	4,228,400
Literature Board	1,552,929	38,220	1,591,149	1,591,800
Crafts Board	914,498	27,929	942,427	945,200
Film, Radio and Television Board(*a*)	2,150,814	38,486	2,189,300	2,189,300
Aboriginal Arts Board	892,706	52,406	945,112	945,200
Total	*19,238,420*	*752,835*	*19,991,255*	*20,000,000*
Administration	..	..	2,195,411	2,235,200
Grand total	..	..	**22,186,666**	**22,235,200**

(*a*) Functions transferred to the Australian Film Commission in 1976.

The National Estate

Heritage Commission

In May 1973 a Committee of Enquiry was appointed to define the 'National Estate' and to offer suggestions on action in its area. The Committee recommended the establishment of a permanent commission on the national estate to be called the Australian Heritage Commission. Meanwhile an Interim Committee, consisting of both departmental and private members, was established and first met in September 1974. The Interim Committee advised the Ministers for Urban and Regional Development and for Environment and Conservation on matters pertaining to the protection, conservation and preservation of the National Estate.

The Act to establish the Australian Heritage Commission was assented to in June 1975. Essentially, the prime function of the Commission is to convey to the Government its expert and considered advice on the state of the National Estate and on the measures that should be taken to ensure its responsible conservation. In addition, the Commission has a statutory task of preparing a Register of the National Estate.

Australian National Trusts

The Australian National Trusts were founded to further the preservation of lands, places, buildings, works, and articles which are of national importance because of educational, aesthetic, historic, architectural, artistic, scientific, cultural, or other special interest.

The first National Trust, the National Trust of Australia (New South Wales), was formed in 1954. Since then National Trusts have been formed in each of the other States and the Northern Territory. The Trusts in New South Wales, Queensland, South Australia, Western Australia, Tasmania and the Northern Territory have statutory authority and that in Victoria is incorporated under the Companies Act of Victoria.

Membership of the National Trusts is open to all individuals and organisations. Total membership throughout Australia is approximately 60,000. The Trusts are financed by members' subscriptions and donations from individuals and commercial and industrial organisations, the proceeds of charges for entry to Trust properties and the fund raising activities of members, including inspections of historic buildings. Each State National Trust receives financial support from the Commonwealth Government in the form of an administrative grant-in-aid of $30,000 each per annum and each receives support from its State Government.

The Australian Council of National Trusts was incorporated in 1965 to co-ordinate the activities of the State National Trusts and represent them at federal and international level. The Commonwealth Government supports the Council through an annual grant of $60,000 for administrative purposes and also provides support to the Council and State Trusts through taxation concessions.

In the past three years the National Trusts have received substantial grants from the Commonwealth Government under the National Estates program for capital projects, mainly the restoration of buildings and conservation studies. They have also supervised projects of other organisations financed under the program.

The number of properties owned or controlled by the Trusts exceeds 200. These include houses such as Clarendon (Tas.), natural reserves, a telegraph station, stock exchange (Charters Towers, Qld), a powder magazine, a market (Castlemaine, Vic.), an inn (Overland Corner, S.A.), a police station, a court house, a gaol, an historic hamlet (Greenborough, W.A.), two paddle steamers and an iron barque, a joss house and a garden (Leura, N.S.W.). The Trusts have established registers of places including buildings, urban areas and landscapes (totalling 13,000) which they consider should be preserved as part of the national heritage.

Historic Memorials Committee

The Historic Memorials Committee was established in 1911 for the purpose of securing portraits of distinguished Australians who had taken an active part in Federation. Later the Committee decided to obtain portraits of all Governors-General, Prime Ministers, Presidents of the Senate, Speakers of the House of Representatives, Chief Justices of Australia, and other notable Australians. In addition the Committee has commissioned paintings recording special events connected with the Commonwealth Parliament.

The Committee comprises the Prime Minister (Chairman), the President of the Senate, the Speaker of the House of Representatives, the Vice-President of the Executive Council, the Leader of the Opposition in the House of Representatives, and the Leader of the Opposition in the Senate. The Committee is advised on commissioning of portraits by the Visual Arts Board of the Australia Council.

The performing arts

Festivals

Festivals of the arts are playing an increasing role in the nation's cultural life and there are now over 350 being presented throughout Australia. The two biggest are Adelaide's biennial and Perth's annual festivals, both of which last several weeks and present overseas artists as well as leading Australian companies. Whilst all States have regular arts festivals Tasmania, Queensland and the Australian Capital Territory are in the process of establishing major arts festivals and Victoria's large popular festival 'Moomba' has a substantial arts program.

Other popular festivals are introducing arts events and many small country centres now have arts festivals which attract performers and artists from a wide area. Purely amateur and competitive performances are being infused with increased professionalism. Seminars, arts workshops and community participation programs are increasingly popular.

Theatre

Commercial theatre organisations play an important role in the theatrical life of the country, providing musicals and plays, and bringing to Australia overseas companies such as the Leningrad Kirov Company, the Royal Shakespeare Company and the Moscow Circus. Commercial theatre organisations and enterpreneurs frequently collaborate with government subsidised organisations in arranging joint festival attractions and visits by internationally acclaimed artists and companies. Established non-commercial professional companies in all States are subsidised.

Travel grants and study grants are made available to those seeking advanced training in professional, artistic, administrative and technical aspects of the performing arts.

International exchanges in the arts are seen to be of special importance and eminent overseas producers, performers and choreographers have visited Australia for short periods to work with Australian theatre companies.

There is a strong demand both for new Australian works and for Australian content in television programming. This growing activity in the arts is giving Australian artists new creative opportunities and a larger measure of public recognition and acceptance.

Opera

The Australian Opera was created in 1956 under the auspices of the Australian Elizabethan Theatre Trust to form the basis of a national touring opera company. It was known as the Elizabethan Trust Opera Company until the end of 1969 when the Australian Opera formed its own Board of Directors. In its early years the company retained only a core of full-time administrative officers and engaged its singers for each annual season. These seasons involved the presentation of three operas in most years and a tour circuit covering each State. In September 1973 the Australian Opera opened its first season in the new Sydney Opera House. It currently employs a chorus of 51 singers and 36 resident soloists on a permanent basis.

The 1975 budget for the Australian Opera is $4,300,000; this does not include the cost of the orchestras (which are still financed through the Elizabethan Theatre Trust). Of this total, approximately $1,700,000 comes from State and Federal subsidies or from donations from individuals or industry. The Federal grant was $1,350,000. The remaining $2,600,000 is met from box office receipts, in Sydney and on tour.

In addition to the Australian Opera, small professional opera companies have been established in each capital city. These companies tour extensively within their resident State and performances in schools are an important part of their work.

Ballet

The Australian Ballet Foundation was formed in 1961 by the Australian Elizabethan Theatre Trust and J. C. Williamson Theatres Ltd to establish a national ballet company, which gave its first performance on 2 November 1962.

The establishment of a permanent Australian company, the appearance of the world's leading artists with the company, the commissioning of works by Australian composers, choreographers and designers and presentation of the company overseas were achieved within the first three years.

The Australian Ballet receives subsidies from the Federal Government (through the Australia Council), the six State Governments and the major municipal bodies (through the Australian Elizabethan Theatre Trust). It also receives support from private corporations and individuals. The Australian Ballet has its headquarters and studios in Melbourne.

The 1975 budget for the Australian Ballet is $2,800,000; of this some 32 per cent ($900,000) is met by Commonwealth Government subsidy, and 5 per cent by grants from State governments. This figure does not include the services of the Elizabethan Trust Orchestra which is maintained by the Trust to service the requirements of the Australian Ballet. Much of the remainder is met from box office receipts.

The Australian Ballet School is associated with the Australian Ballet, and shares its Melbourne premises.

Music

The Music Board of the Australia Council is responsible for administering Commonwealth Government assistance to music and opera. Assistance is provided for a wide range of music activities—one of the most important is the development of Australian music and the growing interest in the work of Australian composers.

The development of music in Australia has been influenced by difficulties imposed by the size of the country and its small population. Australia has eight fully professional symphony orchestras. Six were established by the Australian Broadcasting Commission and two by the Elizabethan Theatre Trust. There is one in each State capital and two others permanently attached to the national ballet and opera companies. The A.B.C. orchestras tour in their respective States. The Sydney and Melbourne Symphony Orchestras have both toured abroad with acclaim.

Orchestral Music

The Australian Broadcasting Commission controls six symphony orchestras and a national training orchestra and organises about 750 concerts each year. This makes it one of the biggest musical entrepreneurs in the world. Since the inception of television, more than 50 operas have been produced in A.B.C. studios, and over 1,400 resident performers have been used. There is a constant flow of artists between Australia and other countries and the A.B.C. has played a significant part in encouraging this movement. The Commission has also been responsible for bringing to Australia internationally renowned orchestras. For further details of the Australian Broadcasting Commission *see* pages 416–18.

Chamber Music

Musica Viva Australia organises tours in Australia by overseas chamber music ensembles of international repute. It is a non-profit making voluntary organisation with over 3,500 members in all States and has a small paid administrative staff. The society also assists Australian chamber music groups to tour overseas and it has been responsible for helping many Australian groups reach international standards.

In addition to Federal Government assistance through the Australia Council, Musica Viva Australia has received aid from the State Governments of New South Wales and Victoria. It has also received some assistance from private and corporate donations.

Film

Australian Film Commission

The Australian Film Commission, established by the *Australian Film Commission Act* 1975, assists Australian film and television producers with funds and services for the production, distribution and exhibition of Australian films and television programs within Australia and abroad.

In July 1975 the Commission subsumed the activities of the Australian Film Development Corporation and Film Australia, the official film production agency for Commonwealth Government departments and instrumentalities.

In June 1976 the Government decided, as a further step in the rationalisation of Government film, radio, television and audio-visual activities, that the Commission should become responsible for the Australia Council's film, radio and television functions.

The Commission distributes theatrical, non-theatrical film and television productions in Australia and overseas through its representatives at Australian official posts. Non-theatrical distribution in Australia is arranged with State film distribution agencies and through the National Library of Australia.

Between sixty and seventy films are produced annually by the Film Australia Branch with translations into as many as twenty-six languages.

These films deal with matters of national interest to Australia and are designed to illustrate or interpret aspects of Australia or of the life and activities of the Australian people.

In 1974–75 Film Australia produced 64 new films comprising 143 reels (each of 10 minutes duration) and translated 170 films consisting of 203 reels into other languages.

Film and Television School

The Film and Television School was established as an independent statutory authority by Act of Parliament in 1973 and is governed by a fifteen member Council.

The School's principal activities are:

Full-time program—a three year full-time course providing professional training for creative positions in the film and television industry and for work with film and television in education.

Open programs—provides, on an Australia-wide basis, training courses of shorter duration including workshops, seminars, public lectures and refresher courses for people involved in the film makers and video specialists in the audio-visual communications field.

Training assistance and grants-in-aid—the school administers grants-in-aid to suitably qualified people who may benefit from study, experience or training within Australia or overseas.

Other activities—the School conducts programs to assess employment opportunities for graduates, industry training needs, student research activities and maintains an extensive collection of film and television library materials.

In June 1976, as a step towards rationalisation of Government film, radio, television and audio visual production activities, it was decided that the School should become responsible for training in radio and audio visual communications.

Film Censorship

The Federal Government's film censorship powers under the Customs Act extend only to imported films and imported advertising matter. Under that Act the Customs (Cinematograph Films) Regulations provide for the appointment of a nine-member Film Censorship Board whose function is to register films and approve advertising matter unless they fall into certain defined categories. Importers may appeal against decisions of the Film Censorship Board to the Films Board of Review.

The Attorney-General's Department is responsible for film censorship and all States have agreed that the Federal Boards should be the censorship authorities for the purpose of the State Acts.

Thirty-five mm feature films: In 1975 916 feature films (including 18 Australian films) totalling 1,472 hours running time were examined. Thirty-one feature films were rejected and 25 were cut. There were 21 appeals of which 3 were upheld and 18 dismissed. Of the 916 features, 153 were classified For General Exhibition ('G'), 200 Not Recommended for Children ('N.R.C.'), 231 For Mature Audiences ('M'), and 194 For Restricted Exhibition ('R'). One hundred and seven were registered subject to special conditions.

The principal suppliers were United States of America (249 films), Italy (112 films), Greece (96 films), United Kingdom (80 films) and Hong Kong (63 films).

While the 'M', 'N.R.C.' and 'G' classifications are advisory, persons between the ages of 2 and 18 (6 and 18 in New South Wales and Victoria) are excluded by law from seeing 'R' films.

Sixteen mm feature films: Excluding those imported for television use, 151 feature films (including 19 Australian films) totalling 236 hours were examined.

Television films: In 1975, 10,996 films for use on television were examined. These consisted of 7,197 sixteen mm films (totalling 4,455 hours) and 3,799 videotapes (2,136 hours). The principal suppliers were the United States (8,753 films) and United Kingdom (2,006 films). Of the total imports 164 films were cut and 39 were classified as unsuitable for television.

Art

The Visual Arts Board

The Visual Arts Board of the Australia Council, which is the Commonwealth Government's advisor on matters pertaining to the visual arts, is the body responsible for the promotion of excellence in the visual and plastic arts throughout Australia.

In co-operation with the Department of Foreign Affairs, the Board arranges exhibitions of Australian art to tour overseas, and also arranges Australian participation at an official level in international art competitions. Exhibitions of important international art tour Australia under the auspices of the Visual Arts Board, often in association with the Australian Gallery Directors' Council.

Art prizes. A number of valuable art awards are offered regularly, including the Archibald Prize for portraiture, the Wynne, Sulman, Blake and Rubenstein Prizes and the annual Britannica awards. Business houses also award prizes and sponsor travelling exhibitions.

The Australian National Gallery

The foundation stone for the Australian National Gallery on the shores of Lake Burley Griffin in Canberra, was laid by the Prime Minister on 7 November 1973. The Gallery building is due for completion in 1980. It is 23,000 square metres in area which includes fourteen exhibition galleries taking up 30 per cent of the floor space. The remainder will accommodate theatres and a theatrette, an education section, a library, a conservation laboratory, administrative and workshop areas and stores.

The collection will include Australian fine and minor works of all periods, international modern fine and minor arts, graphic arts, ethnic art of Black Africa and the Pacific Basin, Asia and the Far Eastern Art, films, photography, theatre and fashion arts and a collection of masterpieces or outstanding works of art as they are available. Since Federation more than 2,000 Australian works have been acquired. 1971-72 saw the acquisition of the first group of "international" works of art.

The Australian National Gallery Interim Council was established in September 1974 with the authority to purchase works of art on its own initiative within the budgetary limit imposed by Parliament. With the proclamation of the *National Gallery Act* 1975 in June 1976, the Interim Council ceased operation and the first Council of the Australian National Gallery was appointed to conduct the Affairs of the Australian National Gallery, which is now a Statutory Authority.

Other galleries

Other important art collections are housed in the Australian War Memorial and the public galleries in all State capitals and many of the larger country centres. As well as these galleries there are many municipal and private trust institutions, and university and private collections. Some descriptive detail of the major art galleries in Australia is given on pages 547–9 of Year Book No. 55 and in the State Year Books.

Crafts

The importance of crafts in Australia has been influenced by the findings of the Federal Government's Committee of Enquiry into the Crafts in Australia (1975). The Crafts Board of the Australia Council (formed in 1973) is concerned with the promotion of excellence and understanding of crafts in the community. It has a comprehensive exhibitions program supporting a wide range of craft exhibitions both in Australia and overseas. The Board is anxious to widen opportunities for education and training in the crafts and has introduced direct support under a training program and a craftsman-in-residence scheme.

Under its grants program the Board funds organisations for equipment purchases, workshops, exhibitions, publications, films, and in some cases administrative expenses. It makes grants to individuals for workshop establishment and development, study and research, master craftsman/trainee scheme, and special grants for research and travel.

The Crafts Board financially supports and collaborates with the Crafts Council of Australia, the national organisation of the State and Territory Craft Associations.

Museums

In each State there is at least one major State-run museum. There are also many smaller museums owned by municipal councils, district and historical societies, private trusts and private individuals. The two major national museums in the Australian Capital Territory are the Australian War Memorial and the Australian Institute of Anatomy.

Some descriptive detail concerning the more important institutions is given on pages 547–9 of Year Book No. 55 and in the State Year Books.

Literature

The Literature Board

From the founding of the Australian Council for the Arts, (now the Australia Council), an effort was made through the Literature Board to substantially increase financial assistance to the writing profession. Assistance has increased from $340,000 in 1972-73 to $1,591,800 in 1974-75. Support for creative writers is given through fellowships varying in duration from six months to three years. Writers are also assisted by special grants for research and travel expenses. Other types of grants administered by the Literature Board, include assistance to publishers, literary organisations, seminars, visiting speakers, writers' workshops, conferences, poetry readings and pilot schemes for the promotion of creative Australian writing.

National Literature Board of Review

The National Literature Board of Review was established in 1968, following Commonwealth-State agreement, to achieve uniformity in the administration of laws relating to blasphemous, indecent or obscene publications of *prima facie* literary, artistic or scientific merit. In terms of the agreement the Board is established under the Customs (National Literature Board of Review) Regulations. Appropriate Ministers of any State may, under the Agreement, refer locally published or distributed works to the Board for advice. Subject to retention of final responsibility by each Minister it is the intention of the governments concerned not to act against a publication of merit which the Board advises is suitable for distribution in Australia.

Book publishing

Statistics of book publishing are compiled and published by the National Library.

The table below shows the number of books and pamphlets (including leaflets), published in Australia in 1973, 1974 and 1975 and received by the National Library to December 1975, classified by State or Territory of publication and by class of publisher.

AUSTRALIAN BOOKS AND PAMPHLETS PUBLISHED
BY YEAR OF PUBLICATION
(Source: *Australian National Bibliography, National Library of Australia*)

	Number of titles(a)		
	1973	*1974*	*1975*
State or Territory—			
New South Wales	1,679	1,406	603
Victoria	1,136	1,093	489
Queensland	322	275	118
South Australia	463	423	194
Western Australia	338	242	73
Tasmania	109	68	17
Northern Territory	52	35	1
Australian Capital Territory	980	883	276
Papua New Guinea	238	75	5
Total	*5,317*	*4,500*	*1,776*
Publisher—			
Commercial	1,798	1,848	1,219
Commonwealth Government	943	826	238
State Government	775	698	136
Local government	45	15	1
Society, institution, company, private	1,756	1,113	182
Total	*5,317*	*4,500*	*1,776*

(*a*) Received by the National Library to December 1975.

Libraries

An account of the establishment, growth and functions of the National, Commonwealth, and State Libraries is given on pages 533–538 of Year Book No. 55.

Australian Government libraries

National Library of Australia, Canberra. The National Library maintains and develops a national collection of library material, representative of all the major countries of the world, and it is also responsible for assembling a comprehensive collection of library material relating to Australia and the Australian people. In fulfilment of the latter statutory function it seeks to preserve books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving picture films, music scores, sound recordings and other recorded material whether in writing or some other form. Under the deposit provisions of the *Copyright Act* 1968, a copy of all library material published in Australia is delivered to the National Library. The Library has also been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews ornithological collection in 1940, the Rex Nan Kivell collection of 16,000 items of Australian and Pacific interest including original paintings, prints, manuscripts, and printed material in 1959, and the Ferguson collection of Australiana, acquired in 1970. The Library maintains a permanent exhibition of paintings, prints, and other historical material selected from its various collections.

In association with the State Library of New South Wales, the Library is engaged on a microfilming project to copy original records relating to Australia which are held in Great Britain and other overseas countries. The computer produced *Australian National Bibliography* which appears weekly, monthly, four monthly and annually, lists books published in Australia and books dealing wholly or substantially with Australian subjects or written by Australian authors. The publications of the Australian governments, included in *Australian National Bibliography*, are also listed quarterly and annually in *Australian Government Publications*. A select list of authoritative Australian books of reference and research value is published annually in *Australian Books*. A similar list of serials is published in successive editions under the title *Current Australian Serials*. The Library's *Australian Public Affairs Information Service*, published monthly with annual cumulations, is the major periodical index to Australia's political, economic, social and cultural life. *Australian Maps* has been issued quarterly from 1968 with a 10 year cumulation for the period 1961–1973 and annual cumulations from 1974.

The provision of central cataloguing services is an important function of the National Library aimed at achieving cataloguing economies on a national scale. Established in 1967, the Australian Card Service makes available catalogue cards for titles listed in *Australian National Bibliography*. Since 1970 cards for overseas books have been available from the Overseas Card Service. Australian libraries with access to computer facilities can order machine-readable records for Australian and overseas books through the Australian MARC Record Service. The Library also operates the Australian Cataloguing in Publication Program whereby, as a result of the co-operation of many trade and academic publishers, books published in Australia are catalogued in advance of publication and the cataloguing data printed in the books. These data also appear as preliminary entries in *Australian National Bibliography*, the Australian MARC Record Service and the Australian Card Service.

Co-operative bibliographical activity includes recording, in a series of union catalogues, the holdings of the major Australian libraries. The national union catalogue of monographs, maintained in card form, was commenced in 1960 and since then all the larger, and an increasing number of smaller libraries have reported their monograph accessions to the National Library. This catalogue is being published on microfilm, so duplicate copies can be held in major research and academic libraries in Australia, Papua New Guinea and New Zealand. Access is thus decentralised and speeded. The second major published union catalogue is the continually updated *Serials in Australian Libraries, Social Sciences and Humanities*, which complements another catalogue, *Scientific Serials* in Australian Libraries, published by the Commonwealth Scientific and Industrial Research Organization. Other union catalogues maintained and/or published by the National Library cover manuscripts, newspapers, music and oriental language material. All are described in the *Guide to the National Union Catalogue of Australia* which the Library periodically re-issues.

The Library has since 1969 operated a number of automated data bases which provide computer produced bibliographies of recent and current material to users either in printed form or on-line. It also provides access through international links to data bases operated elsewhere. Over 40 data bases are now accessible to Australian users through the National Library.

The National Library acts as a central library of documentary and educational films. Its lending collection of approximately 17,000 films contains both Australian and overseas material on a wide range of topics, whilst its historical collection constitutes the major holding of Australian film production since its beginning in 1896. Additions to the film lending collection are recorded in *Film Acquisitions* published quarterly, with annual cumulations.

The National Library's collections of Australian and overseas material contain over 1,625,792 volumes, 27,400 paintings, drawings and prints, 191,607 photographs, 134,112 reels of microfilm, 914,561 microfiche pieces, 268,824 microprint/microcard pieces, 2,370 metres of manuscripts, 18,153,000 metres moving picture film, 125,000 stills, 822,070 maps and aerial photographs, 27,256 music scores, 220,285 sound recordings and tapes, as well as 1,682 oral history tapes. It also has 3,400,000 data records used for producing published bibliographies and current awareness services in the bio-medical fields.

Patent Office Library. The Library of the Australian Patent Office, Canberra, contains approximately 17,500 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark and design) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are over 14,500,000. Indexes include a microfilm of a classified index to 3,000,000 U.S.A. patents and translations of abstracts of U.S.S.R. patents.

Commonwealth Scientific and Industrial Research Organization. The Central Library was brought into the newly formed CSIRO Central Information, Library and Editorial Section at the end of 1973. Its holdings cover the pure and applied sciences. In addition to the Central Library located in East Melbourne, each of the Divisions has specialised collections. The Library maintains a union catalogue of the holdings of all CSIRO libraries, and maintains the constantly updated *Scientific Serials in Australian Libraries*. With the Information Service, it publishes the monthly *CSIRO Abstracts* and *Australian Science Index*, and directories such as *Australian Scientific Societies and Professional Associations* and *Scientific and Technical Research Centres in Australia.*

The Information Service provides a question-and-answer service and operates the CSIRO Selective Dissemination of Information (SDI) System.

The Australian War Memorial Library, Canberra. In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services in wars in which they have participated. The printed records section contains over 70,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings, war posters, and postage stamps. The collection of official war photographs covering the 1914–18, 1939–45 and Korean wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war. Adequate facilities exist for public research and requests for information are met where practicable.

The Australian Parliamentary Library. The Library's special function is to provide an information and research service to the Commonwealth Parliament. The two main sections are the Legislative Research Service and the Legislative Reference Service. The Research Service comprises six groups staffed by subject specialists who prepare analyses and interpretations of specific issues with which the Parliament is or may be concerned. The Reference Service staffed by Librarians answers questions and provides information. The library collection is concentrated on topical material, supported by a wide collection of standard references; it totals 40,000 titles, including 8,500 serial titles. The library publishes the *Australian Parliamentary Handbook*, which is a standard reference work, occasional annotated reading lists and, in alternate fortnights, *Index to Current Information* and *Select Lists of Acquisitions.*

Other Commonwealth Government libraries. Most Commonwealth Government authorities have specialised collections in their own fields and in addition draw largely on the National Library.

Library services in the Territories. The Northern Territory Library Service maintains five centres in the Territory; at Darwin, Nightcliff, Alice Springs, Tennant Creek and Katherine. At 30 June 1974, stocks totalled 67,124 volumes.

The National Library, through its Extension Services Section, conducts the Canberra Public Library Service to residents of the Australian Capital Territory. At 30 June 1975, 456,037 volumes were held.

State libraries

Most municipal councils in the States have libraries funded largely by State governments. A detailed description of State libraries is given on pages 685–690 of Year Book No. 59 and in each State year book.

Children's libraries and school libraries

Children's libraries exist in all States, usually as branches or extensions of State or municipal libraries. Further details of children's libraries and school libraries are given on pages 689 and 690 of Year Book No. 59.

University and college libraries

Since 1957 when the Commonwealth Government inaugurated a comprehensive program of university expansion, there has been notable development of university libraries, and similar development is now taking place in colleges of advanced education. Some current information on university libraries is given in the ABS annual publication *University Statistics—Part 2: Staff and Libraries* (13.8).

Archives

Australian Archives

An account of the development of the Commonwealth Archives Office, renamed Australian Archives from 7 March 1974, and a detailed description of its functions appear on pages 543–4 of Year Book No. 55. Australian Archives functions as a central agency for the control of records created by the Commonwealth Government which are no longer required in the day-to-day business of government. At 30 June 1975 the total holdings of Australian Archives throughout Australia amounted to 210,000 shelf metres of records, including 80,000 metres of permanent material, such as files, manuscripts, registers, cards, books, maps, plans, models, paintings, films, photographs, microfilms, recordings and tapes. Australian Archives regulates access to all Commonwealth Government records, whether in its custody or held by departments, in accordance with the Government's access rules.

In 1971, the 50-year closed access period was reduced to 30 years. In January 1972 it was announced that the 30-year rule would apply to Cabinet papers also, with accelerated release of both Cabinet and departmental records created prior to 1 January 1946 to allow study of the Second World War as a whole.

Australian Archives provides an advisory service to inquirers, both official and public. During 1974–75, 700 official reference inquiries were received and 300,000 items lent to government departments. Some 600 research inquiries were also received. Extension services, promoting the use of archives in the field of education, and displaying material of interest for public exhibition, are envisaged. These facilities will be greatly improved when the National Archives building for the National Capital is erected.

The headquarters of Australian Archives is in Canberra, and there are branches in Sydney, Melbourne, Brisbane, Adelaide, Perth, Darwin, Hobart and Townsville. Australian Archives maintains liaison with similar organisations in overseas countries and is a national member of the International Council on Archives, established under the auspices of UNESCO.

State government archives

State government archives, dating from the beginning of European settlement in 1788, are held, in the case of New South Wales, Tasmania and Victoria, by archives offices established in 1961, 1965 and 1973 respectively, and, in other States, by the archives sections of State libraries.

Australian National University Archives of Business and Labour

The Australian National University Archives was established in 1954 when the records of the Australian Agricultural Company were acquired, and in 1959 its collecting activities were expanded to include records of employer and employee organisations. The aim is to gather primary source material to support advanced research within the university in economic history, history and political science. Records of over 100 businesses (153 deposits) and over 100 employer and employee organisations (242 deposits) are held.

The University Archives include deposits which have been microfilmed and pamphlet collections of interest to research workers in political history. In addition an archival program for the University's own records is being developed with the ultimate aim of creating a central University Archives.

Business Archives Council of Australia

The Business Archives Council of Australia works for the preservation of business records and promotes the writing of business history. The Council itself does not collect business records. The main collecting centres are the Archives of the Australian National University, the University of New England and University of Melbourne. The Australian National University and the University of Melbourne have strong collections covering a wide range of business activity, and are respectively notable for records of trade unions and mining companies. The University of New England concentrates on rural industries. The Archives of Wollongong University concentrates on collecting business and trade union records of the Wollongong region.

Other Australian archives

The Mitchell Library has been acquiring manuscript material since the early years of this century. More recently, the National Library, State libraries, some archives offices, a few public libraries and historical societies, the Australian Academy of Science, and the Australian War Memorial (which is also the archival authority for the custody and preservation of operational records of the armed services) have assembled important collections of private papers. Ecclesiastical archives have been set up by some of the churches. Some firms have established their own archives services and the Business Archives Council plays a co-ordinating role. State and local historical societies help to preserve regional, local and private historical material.

Botanical and zoological gardens

In addition to the zoological gardens referred to in the following paragraphs there are numerous privately owned zoos and sanctuaries, many of them at tourist resorts, which maintain collections of Australian flora and fauna. There are also various national parks, forests, reserves, etc., dedicated for public use, which are preserved largely in their natural condition. More detailed information is given in each State year book.

New South Wales: The Sydney Botanic Gardens are situated on the shores of Farm Cove, Sydney Harbour. They occupy 27 hectares and contain a large collection of flowering plants, shrubs and trees as well as hothouses of orchids and ferns.

The Zoological Gardens at Taronga Park, on the northern side of Sydney Harbour are administered by the Zoological Parks Board and occupy about 30 hectares including an aquarium. In 1974-75 paid admissions to the grounds were 849,130. The receipts of the zoological department amounted to $1,157,112 in 1974-75 and expenditure was $1,452,498. Exhibits at 30 June 1975 comprised 902 mammals, 1,628 birds, 288 reptiles and 819 invertebrates and fish.

An open range zoo, the Western Plains Zoo, is being constructed by the Board at Dubbo in Western New South Wales.

Victoria: The main botanical gardens in the State are the Royal Botanic Gardens, an area of 36 hectares within 1.6 kilometres of the centre of the City of Melbourne, containing over 12,000 species of plants, of which there are some 30,000 individual specimens. Many species of native birds breed on islands in lakes within the gardens. In October 1970, an extension was made to the Royal Botanic Gardens by the purchase of 160 hectares at Cranbourne on Mornington Peninsula for purposes of a Botanic Gardens and Research Institute devoted to the growing, display and study of Australian native plants.

The Zoological Gardens in Royal Park contain a wide selection of animals, birds and reptiles. A wild life sanctuary is also maintained at Healesville.

Queensland: Botanical gardens have been established in Brisbane and in several other cities. The Brisbane Botanic Gardens occupy approximately 18 hectares on the banks of the Brisbane River in the central city area and are noted for their collections of palms, tropical trees and shrubs, and succulents; they contain over 8,000 species.

Initial development has started on a new botanic gardens in the foothills of Mount Coot-tha, about 5 kilometres from central Brisbane. The area being developed is approximately 75 hectares.

South Australia: The Adelaide Botanic Garden covers 20 hectares and contains collections of Australian and exotic plants from low rainfall and sub-tropical regions. In glasshouses are collections of tropical, ornamental and economic plants. Special collections include cacti and succulents, bromeliads, and begonias. An up-to-date comprehensive botanical and horticultural library is maintained. The State Herbarium, established in 1952, contains about 250,000 specimens. Blackwood and Mount Lofty also have important plant collections.

The Zoological Gardens, opened in 1883, have an area of approximately 8 hectares, and contain a fine collection of animals, reptiles and birds.

Western Australia: A botanical garden and arboretum which contain approximately 1,200 species of native Western Australia plants and trees, are established in Kings Park, a reserve of about 400 hectares close to the centre of Perth.

The Zoological Gardens of 18 hectares at South Perth specialises in the collection of Australian and particularly Western Australian fauna.

Tasmania: The Royal Tasmanian Botanical Gardens adjoining Government House of the Queen's Domain, contain a fine collection of exotic trees and shrubs and a small aviary.

The Launceston City Council keeps a small collection of animals and birds at City Park and there is a private wildlife sanctuary and zoo at Punch Bowl in Launceston.

Northern Territory: The Darwin Botanical Gardens occupy 30 hectares and feature 12 hectares of tropical plants of both native and overseas origin. Two hectares are used for an amphitheatre and contain a number of native and exotic plants. The Gardens are controlled by the Corporation of the City of Darwin. The Gardens were extensively damaged by Cyclone Tracy in December 1974 and, along with extensive planting of Palm Species, every effort will be made to restore and improve the Gardens.

Australian Capital Territory: The Canberra Botanic Gardens, a 40 hectare site on the lower slopes of Black Mountain have been under development since 1950. The Gardens, comprising Australian native plants, were officially opened in 1970.

The Tidbinbilla Nature Reserve covers 4,650 hectares of the Upper Tidbinbilla Valley, about 40 kilometres from Canberra. It was declared a Nature Reserve under the Public Parks Ordinance in 1971. Attendances have risen from 42,700 in 1967 to approximately 200,000 in 1975.

The Nature Reserve at Jervis Bay consists of 4,420 hectares of coastal area. Although the area has been managed as a reserve over a number of years, it was only officially declared a reserve on 7 October 1971.

RECREATION

The Department of Environment, Housing and Community Development was established in December 1975 and assumed responsibility among other things, for co-ordinating such aspects of leisure as community recreation, fitness, sports development, and youth affairs.

A number of State governments have also established departments with special responsibilities for recreation. Some local government authorities are now employing recreation workers who are responsible for planning the use of recreation facilities, and for devising programs of community recreation.

Community recreation

The former Department of Tourism and Recreation, as part of its concern to encourage community involvement in recreation planning, assisted with the preparation of a number of regional plans. These plans comprised an inventory of existing and potential recreation resources, programs and leadership resources, and identification of future needs.

Other projects in the field of Community recreation have included examination of the educational needs of, and the demand for, recreation workers; detailed studies of aspects of community centre development and community requirements; and an examination of the possible integration of community centres with facilities at schools.

Capital assistance program

The Department administers a capital assistance program to meet some of the immediate needs for recreation facilities in the community. Any project which increases the range of leisure opportunities within a local area has been eligible for a grant under this program. Although development of specialist facilities is not excluded, emphasis is placed on facilities which encourage mass participation, e.g. multi-purpose facilities within which sporting, cultural and social programs can be pursued.

In 1974–75, an amount of $14.4 million was allocated under this program. A total of 386 projects for the development of single and multi-purpose sporting and recreation complexes were approved for assistance.

Education for recreation workers

A study which was commissioned to examine policies for the future education of recreation workers in Australia was completed in 1973. It recommended the establishment of courses in recreation at diploma and graduate levels at colleges of advanced education. Three graduate diploma and four associate diploma courses have now commenced.

This study was extended to examine the demand for recreation workers. It showed that 754 recreation workers were employed throughout Australia at the end of 1973. By the end of 1978, a further 2,560 workers will need to be trained.

Voluntary workers

A program to assess the effectiveness of training voluntary recreation workers, and to identify their future needs is being conducted in co-operation with State governments departments. The program aims to educate voluntary recreation leaders in each State. The Department's advisory service is intended to provide voluntary workers with information, ideas and advice to enable them to develop more effective programs, and to exchange information about their activities. In addition the Department provides some assistance with innovative programs for special groups such as the handicapped, the aged, young people and women.

Fitness

National fitness movement

The Commonwealth Government initiated the National Fitness movement as a war time measure to improve the standard of fitness of Australian youth. Under the *National Fitness Act* 1941, the Government allocates funds to the various State National Fitness Councils to assist with the administrative costs of national fitness activities catering for the total community.

In 1974–75, Commonwealth Government assistance to the National Fitness movement, through the National Fitness Fund Trust Account, was $850,000. Of this amount $600,000 was directed to cover the operational expenditure of State Councils and $150,000 was provided as capital assistance on a $1 for $2 subsidy basis to improve national fitness facilities. An amount of $150,000 was also provided to develop sports training facilities at national fitness camps. In 1975–76, an amount of $600,000 was allocated to assist with operational expenses.

Sports development

Sports assistance program

During 1974–75, national sporting organisations received more than $969,000 in Commonwealth Government assistance through a sports assistance program. The program subsidises the organisation of and participation in national sporting events and international events both within Australia and overseas. Coaching programs, administrative improvements and selected projects of a cultural exchange nature have also received support.

The construction of sports facilities was also assisted by grants under the capital assistance program.

Life saving movement

Since 1951, the Commonwealth Government has provided grants for both the Royal Life Saving Society and the Surf Life Saving Association of Australia. In 1974–75, the Government provided $50,000 to the Royal Life Saving Society for administrative purposes and $280,000 to the Surf Life Saving Association. Of this amount, $144,000 was provided on a dollar for dollar subsidy basis for the purchase of rescue equipment at club level, $66,000 for administrative purposes, $60,000 for the purchase of power rescue craft, and $10,000 to assist needy clubs.

Australian Sports Council

In August 1974, the Commonwealth Government established an Australian Sports Council, consisting of 14 members, to give expert advice on the development of sport and physical recreation. The Council last met in September 1975 and its future is currently under review.

Youth affairs

Most youth activities and programs in Australia are provided by voluntary youth organisations, many of which are organised nationally. The Commonwealth Government provides financial assistance to these national organisations to enable them to better serve young people and the community in general. In 1974–75, $250,000 was provided for national youth organisations.

In co-operation with all State government departments responsible for youth matters, the former Department of Tourism and Recreation conducted 'Youth Involvement Programs' in all States and the A.C.T. during 1974–75. These programs were designed to encourage young people to become creatively involved with their own communities.

The Department is also responsible for the operation of the Commonwealth Youth Program in Australia.

Tourism

The Department of Tourism and Recreation was established in 1972 and was responsible for the formulation of national policies to assist the development of tourism in Australia and to promote greater domestic travel within Australia. It aimed to attract more overseas visitors to Australia and to encourage them to travel more extensively in Australia by the development of Australia's tourist areas and tourist infrastructure. It is also the aim of the Department to encourage the development of a range of accommodation facilities for travellers, with particular emphasis on low-cost accommodation, and to obtain accurate statistical information on all aspects of tourism and travel.

In 1974–75, Commonwealth Government grants of $2,438,000 were provided for the development of certain types of uniquely Australian tourism projects. Additional assistance of $118,000 was provided for allocation to Youth Hostel Associations and similar organisations providing low-cost accommodation, as well as for regional surveys of tourist areas. Since the Department of Tourism and Recreation was abolished in December 1975, the responsibility for overseas and domestic tourism has been with the Department of Industry and Commerce.

Australian Tourist Commission

The Australian Tourist Commission was established in 1967 as a statutory body to encourage people from other countries to visit and travel within Australia. It has nine commissioners including representatives of the Commonwealth and State governments and the tourist industry. In 1975–76 its budget was $4.04 million.

The Commission engages in a wide variety of marketing activities including consumer and trade advertising, industry seminars and familiarisation visits for travel agents, journalists and photographers. The Commission has its head office in Melbourne and branch offices in London, Frankfurt, New York, Los Angeles, Tokyo, Auckland and Sydney.

Tourist Accommodation

Census of Tourist Accommodation Establishments. A Census of Tourist Accommodation Establishments was conducted by the ABS in respect of the year ended 30 June 1974 to identify and measure the amount, type and location of tourist accommodation available throughout Australia. The Census was abandoned in the Northern Territory due to the effects of Cyclone Tracy.

There is no generally accepted definition of a tourist accommodation establishment. For the purposes of the Census, tourist accommodation establishments have been defined as (i) hotels, motels (licensed and unlicensed) and guest houses, which provide predominantly short-term (i.e. for periods of less than two months) accommodation available to the general public and which provide breakfast; (ii) caravan parks and, for the State of Queensland only, holiday flats which provide predominantly short-term accommodation available to the general public.

The scope of the Census covered, in general, tourist accommodation establishments which were in operation at 30 June 1974. Excluded from the Census were establishments in which the number of guest rooms usually occupied by short-term guests was less than 40 per cent of the total number of guest rooms usually occupied and also, establishments which have provision for tourist accommodation but which had no takings from accommodation for the Census period. For a more detailed description of the Census *see Census of Tourist Accommodation Establishments, Australia and Australian Capital Territory, Year Ended 30 June* 1974 (11.50) and *Census of Tourist Accommodation Establishments*, 1973–74 published by the Deputy Commonwealth Statistician in each State.

CENSUS OF TOURIST ACCOMMODATION ESTABLISHMENTS, AUSTRALIA(a) 1973-74
SUMMARY OF OPERATIONS

	Number of establishments operating at 30 June 1974	*Number of persons employed at 30 June 1974(b)*	*Wages and salaries paid $'000*	*Capacity*			
				Number of guest rooms			*Number of bed spaces (d)*
				With facilities (c)	*Other*	*Total*	
BY TYPE OF ESTABLISHMENT							
Licensed hotels	4,111	68,441	217,076	22,435	35,649	58,084	107,473
Licensed motels	480	11,514	33,688	19,066	757	19,823	54,854
Unlicensed motels	1,534	10,049	21,351	27,526	810	28,336	78,168
Private hotels and guest houses	467	2,386	4,822	1,270	10,909	12,179	22,022
Total	**6,592**	**92,390**	**276,938**	**70,297**	**48,125**	**118,422**	**262,519**
BY SIZE OF ESTABLISHMENT							
1– 15 guest rooms	4,236	43,419	115,646	13,613	22,131	35,744	73,510
16– 25 guest rooms	1,243	15,444	44,682	13,658	10,787	24,445	53,845
26– 50 guest rooms	801	15,754	48,821	19,738	7,693	27,431	65,424
51–100 guest rooms	227	7,031	25,598	10,470	4,639	15,109	34,566
101 guest rooms and over	85	10,742	42,191	12,818	2,875	15,693	35,174
Total	**6,592**	**92,390**	**276,938**	**70,297**	**48,125**	**118,422**	**262,519**
BY STATE							
New South Wales	2,277	28,211	83,020	26,831	17,491	44,322	99,581
Victoria	1,397	22,518	64,390	14,285	9,238	23,523	52,633
Queensland	1,443	16,985	54,642	13,613	9,782	23,395	52,603
South Australia	627	10,474	30,998	5,483	4,327	9,810	21,849
Western Australia	566	9,848	30,382	6,854	5,453	12,307	24,010
Tasmania	282	4,354	13,504	3,231	1,834	5,065	11,843
Australia(*d*)	**6,592**	**92,390**	**276,938**	**70,297**	**48,125**	**118,422**	**262,519**
Australian Capital Territory	41	1,617	6,160	1,744	150	1,894	4,916

For footnotes *see* end of table.

SUMMARY OF OPERATIONS—*continued*

	Gross takings ($'000)				
	Accommodation	*Meals*	*Beer, wine and spirits*	*Other*	*Total*
		BY TYPE OF ESTABLISHMENT			
Licensed hotels	82,137	114,344	827,493	57,571	1,081,540
Licensed motels	63,753	36,407	14,258	3,735	118,152
Unlicensed motels	69,816	17,126	. .	2,377	89,318
Private hotels and guest houses	11,782	4,092	. .	989	16,864
Total	**227,490**	**171,957**	**841,753**	**64,673**	**1,305,873**
		BY SIZE OF ESTABLISHMENT			
1-115 guest rooms	37,145	53,541	564,581	40,774	696,041
16– 25 guest rooms	40,169	26,043	131,771	10,191	208,176
26– 50 guest rooms	60,319	36,584	88,822	7,041	192,766
51–100 guest rooms	36,127	20,250	28,751	2,489	87,617
101 guest rooms and over	53,728	35,540	27,828	4,178	121,273
Total	**227,490**	**171,957**	**841,753**	**64,673**	**1,305,873**
		BY STATE			
New South Wales	89,523	42,994	250,139	19,666	402,321
Victoria	45,634	48,109	202,550	9,779	306,072
Queensland	43,263	31,308	181,124	14,474	270,170
South Australia	18,390	21,056	91,215	6,864	137,525
Western Australia	20,234	18,749	85,519	11,541	136,043
Tasmania	10,446	9,744	31,203	2,352	53,745
Australia(*a*)	**227,490**	**171,957**	**841,753**	**64,673**	**1,305,873**
Territory	7,043	4,498	8,228	812	20,579

(*a*) Excludes Australian Capital Territory and Northern Territory. (*b*) Includes working proprietors and part-time staff. (*c*) Guest rooms containing private bath or shower and toilet. (*d*) Refers to the maximum number of guests that could have been accommodated at 30 June 1974. Divans normally used as beds were included; double beds were counted as two bed spaces.

Surveys of Tourist Accommodation Establishments. Quarterly accommodation surveys were commenced in the September Quarter 1975 and data published from these surveys include available capacity, room occupancy, bed occupancy, takings from accommodation and employment.

The main purpose of the survey of tourist accommodation establishments is to measure the utilisation of available tourist accommodation.

The scope and coverage of the survey is similar to that of the Census except for the omission of caravan parks and holiday flats. For a more detailed description of the surveys *see* the quarterly publication *Tourist Accommodation* (11.48)

NUMBER, CAPACITY, OCCUPANCY RATES, TAKINGS FROM ACCOMMODATION AND EMPLOYMENT, AUSTRALIA(*a*)

	Licensed hotels, with facilities(*b*)	*Motels, etc.*(*c*)	*Licensed hotels, private hotels and guest houses without facilities*	*Total*
NUMBER				
December Quarter 1975—				
Establishments	914	1,926	2,899	5,739
Guest rooms	24,643	47.239	39,055	110,937
Bed spaces	53,488	133,420	65,404	252,312
March Quarter 1976—				
Establishments	911	1,926	2,551	5,388
Guest rooms	24,292	47,785	33,947	106,024
Bed spaces	53,186	134,178	57,323	244,687
June Quarter 1976—				
Establishments	927	1,973	2,502	5,402
Guest rooms	24,595	48,630	33,451	106,676
Bed spaces	53,915	136,822	56,681	247,418
September Quarter 1976—				
Establishments	931	1,995	2,476	5,402
Guest rooms	24,614	49,214	33,283	107,111
Bed spaces	54,110	137,641	56,580	248,331
ROOM OCCUPANCY RATES (per cent)				
1975—October	55.9	62.9	32.7	50.7
November	53.0	58.2	31.3	47.6
December	43.5	53.9	30.1	43.2
1976—January	54.9	69.3	35.2	55.1
February	52.8	56.4	30.6	47.3
March	53.8	58.1	30.4	48.2
April	52.2	60.2	31.2	49.2
May	52.9	63.3	31.0	50.7
June	47.1	53.3	28.4	44.0
July	46.3	53.0	27.9	43.6
August	55.0	63.4	31.4	51.5
September	56.3	64.2	31.6	52.3

For footnotes *see* end of table.

NUMBER, CAPACITY, OCCUPANCY RATES, TAKINGS FROM ACCOMMODATION AND EMPLOYMENT, AUSTRALIA(*a*)—*continued*

	Licensed hotels with facilities(b)	*Motels, etc.(c)*	*Licensed hotels, private hotels and guest houses without facilities*	*Total*
BED OCCUPANCY RATES(*d*) (per cent)				
1975—October	38.2	38.1	25.2	34.8
November	35.4	34.4	23.7	31.9
December	31.2	35.2	23.4	31.3
1976—January	42.8	52.4	29.3	44.9
February	35.3	34.4	23.1	31.9
March	35.3	34.7	22.8	32.0
April	36.5	38.5	24.4	34.8
May	36.8	42.1	24.2	36.8
June	30.7	31.8	21.4	29.2
July	30.7	32.0	20.9	29.2
August	38.5	41.9	24.7	37.2
September	39.5	41.8	24.6	37.4
TAKINGS FROM ACCOMMODATION ($'000)				
1975—October	7,858	15,567	2,986	26,411
November	7,189	14,045	2,704	23,938
December	6,013	13,977	2,729	22,718
1976—January	7,992	19,842	3,028	30,863
February	7,074	13,929	2,229	23,232
March	7,833	15,392	2,379	25,604
April	7,531	16,255	2,514	26,300
May	7,928	17,945	2,528	28,400
June	6,610	14,171	2,172	22,952
July	6,899	14,631	2,209	23,740
August	8,525	18,570	2,642	29,738
September	8,594	18,340	2,598	29,531
EMPLOYMENT(*e*)				
31 December 1975	32,794	19,837	29,464	82,095
31 March 1976	31,836	19,974	24,338	76,148
30 June 1976	31,254	19,612	23,281	74,147
30 September 1976	31,876	20,283	23,088	75,247

(*a*) Excludes Northern Territory. (*b*) Guest rooms containing private bath or shower and toilet. (*c*) Includes licensed or unlicensed motels, private hotels or guest houses with facilities. (*d*) Refers to the proportion of bed spaces occupied to the number of bed spaces available expressed as a percentage. (*e*) Includes working proprietors and part-time staff.

Summary information on foreign ownership and control of tourist accommodation establishments is shown in Chapter 11. More detailed statistics are available in *Foreign Ownership and Control of Tourist Accommodation Establishments*, 1973–74 (11.47).

TRAVEL

An article outlining the history and growth of travel and the structure of tourist organisations in Australia, prepared by the Australian National Travel Association, appeared in Year Book No. 52, pages 1158–84. The following pages contain statistics of internal travel and travel to and from Australia, together with some descriptive matter.

Internal travel

In 1973–74, the first national survey of the Australian travel market was undertaken. The survey showed that Australians took an average of two trips of at least one night duration away from home. Fifty per cent of these trips lasted two nights or less and approximately 85 per cent of trips were intra-State trips only. One quarter of all trips, and over one half of all trips classified as main holidays, were taken in December and January. Car travel was the means of transport for 86 per cent of all trips. Private house accommodation was used in over 40 per cent of trips, with hotels and motels accounting for a further 20 per cent.

Overseas travel

Statistics about travellers to and from Australia are classified in the first instance by the actual or intended length of stay in Australia or abroad; this classification distinguishes between permanent and temporary movement.

Statistics of permanent arrivals (immigrants) and permanent departures (emigrants) are shown in Chapter 7 Population.

Traveller statistics (overseas visitors and Australian residents)

Statistics of temporary arrivals and departures which are in the nature of travel statistics are included in this chapter. They comprise two main categories:

(i) *Short-term.* Those who intend to stay or have stayed in Australia (overseas visitors) or overseas (Australian residents) for less than a year.

(ii) *Long-term.* Those who intend to stay or have stayed in Australia (overseas visitors) or overseas (Australian residents) for a year or more, but not permanently. Before 1974, Australian residents travelling abroad were classified as long-term only if they spent at least 12 months in any one country.

Short-term movement excludes persons who arrive in and depart from Australia on the same ship's voyage or on the same flight (variously called direct transit or 'through' passengers) or who change flights without leaving the airport's transit area, passengers on pleasure cruises commencing and finishing in Australia (*see* page 1036), and all crew. However, it includes persons who pass through the Customs Barrier and declare the purpose of their visit to Australia to be 'in transit'. Short-term visitors are more numerous than long-term visitors and have come to be regarded as 'tourists' by many users of the statistics.

From October 1967 to December 1971, 276,885 United States troops came to Australia on rest and recreation leave. The last of them completed their leave in January 1972. For statistical purposes they were classified as short-term visitors travelling by air for holiday purposes and their country of residence and country of embarkation or disembarkation were shown as 'Asia—other'.

TRAVELLER STATISTICS—SUMMARY, AUSTRALIA

	Overseas Visitors				*Australian Residents*			
	Short-term		*Long-term*		*Short-term*		*Long-term*	
Year	*Arriving in Australia*	*Departing from Australia*	*Arriving in Australia*	*Departing from Australia*	*Departing from Australia*	*Returning to Australia*	*Departing from Australia*	*Returning to Australia*
1970	416,128	431,039	31,194	18,727	352,526	351,929	64,215	42,099
1971	432,393	450,022	30,500	21,433	413,917	412,598	67,699	47,782
1972	426,403	441,320	26,559	24,251	504,519	490,962	66,853	54,278
1973	472,124	481,901	27,370	21,506	638,141	620,842	64,964	65,021
1974	532,683	515,378	26,984	24,401	769,650	752,218	66,228	63,320

In addition to the basic classification of travellers shown above, certain other characteristics are ascertained. These characteristics are: sex, age, marital status, country of citizenship, country of birth, occupation, intended and actual length of stay, purpose of journey, mode of transport, country of residence, country of embarkation or disembarkation, State of residence and State of embarkation or disembarkation.

The categories shown in the previous table are cross-classified by various characteristics listed above and resulting statistics are shown in considerable detail in the quarterly and annual bulletins *Overseas Arrivals and Departures* (4.1 and 4.23). Certain unpublished information is available on request. Selected traveller statistics are shown in the following tables.

Short-term travel is subject to marked seasonal variation, December being the peak month for the arrival of visitors and the departure of Australian residents.

OVERSEAS VISITORS AND AUSTRALIAN RESIDENTS: SHORT-TERM ARRIVALS AND DEPARTURES BY MONTH OF ARRIVAL OR DEPARTURE AND MODE OF TRANSPORT AUSTRALIA, 1974

	Overseas visitors						*Australian residents*					
	Arriving			*Departing*			*Departing*			*Returning*		
Month	*By sea*	*By air*	*Total*	*By sea*	*By air*	*Total*	*By sea*	*By air*	*Total*	*By sea*	*By air*	*Total*
January	1,679	42,368	44,047	1,322	56,803	58,125	3,443	52,237	55,680	2.844	92,157	95,001
February	1,376	44,725	46,101	1,527	43,776	45,303	5,140	35,964	41,104	2,297	59,352	61,649
March	1,418	43,917	45,335	1,165	44,127	45,292	3,614	56,164	59,778	2,065	46,706	48,771
April	1,617	39,662	41,279	1,300	40,583	41,883	4,747	76,522	81,269	2,377	42,158	44,535
May	986	37,562	38,548	1,238	44,715	45,953	5,005	70,330	75,335	1,807	56,854	58,661
June	978	31,903	32,881	740	31,698	32,438	3,490	64,578	68,068	3,216	52,544	55,760
July	1,052	36,551	37,603	720	31,660	32,380	2,822	53,278	56,100	2,703	53,315	56,018
August	266	44,102	44,368	173	42,910	43,083	1,232	78,263	79,495	1,137	66,916	68,053
September	711	36,932	37,643	561	39,850	40,411	1,828	48,994	50,822	2,428	84,297	86,725
October	781	44,827	45,608	503	40,170	40,673	1,901	43,905	45,806	2,063	72,342	74,405
November	1,343	49,524	50,867	812	46,689	47,501	2,101	48,657	50,758	2,675	54,352	57,027
December	2,496	65,907	68,403	651	41,685	42,336	2,745	102,690	105,435	3,060	42,553	45,613
Total	**14,703**	**517,980**	**532,683**	**10,712**	**504,666**	**515,378**	**38,068**	**731,582**	**769,650**	**28,672**	**723,546**	**752,218**

The following tables show the stated purpose of journey and intended length of stay abroad of Australian residents departing temporarily and the stated purpose of journey and intended length of stay in Australia of overseas visitors arriving.

AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY BY STATED PURPOSE OF JOURNEY AND INTENDED LENGTH OF STAY, 1974

(Persons)

	Stated purpose of journey									
Intended length of stay	*In transit*	*Convention*	*Business*	*Accompanying business traveller*	*Visiting relatives*	*Holiday*	*Employment*	*Education*	*Other and not stated*	*Total*
Short-term movement—										
Under 1 week	..	916	15,914	804	2,310	10,827	817	183	2,745	34,516
1 week and under 2 weeks	..	3,531	16,962	1,667	5,678	63,747	931	1,696	5,280	99,492
2 weeks and under 3 weeks	...	3,066	14,888	1,835	10,219	117,205	1,430	1,249	7,551	157,443
3 weeks and under 1 month	..	2,009	8,083	873	12,119	48,246	319	352	4,447	76,448
1 month and under 2 months	..	472	18,085	2,352	32,567	57,811	1,300	587	6,999	120,173
2 months and under 3 months	..	201	8,279	1,810	25,296	35,739	861	292	4,510	76,988
3 months and under 6 months	..	134	4,785	1,362	28,277	47,624	1,959	686	5,708	90,535
6 months and under 9 months	..	45	1,936	1,123	16,664	41,952	2,773	510	5,535	70,538
9 months and under 12 months	..	10	1,261	1,440	4,535	11,249	3,776	980	3,187	26,438
Indefinite, not stated	..	89	1,200	581	2,690	8,309	720	203	3,287	17,079
Total short-term movement	..	*10,473*	*91,393*	*13,847*	*140,355*	*442,709*	*14,886*	*6,738*	*49,249*	*769,650*
Long-term movement—										
12 months and over	..	..	3,501	5,801	7,382	19,092	13,946	2,495	14,011	66,228
Total Australian residents departing temporarily	..	**10,473**	**94,894**	**19.648**	**147,737**	**461,801**	**28,832**	**9,233**	**63,260**	**835,878**

OVERSEAS VISITORS ARRIVING, BY STATED PURPOSE OF JOURNEY AND INTENDED LENGTH OF STAY, 1974

(Persons)

	Stated purpose of journey									
Intended length of stay	*In transit*	*Convention*	*Business*	*Accompanying business traveller*	*Visiting relatives*	*Holidaying*	*Employment*	*Education*	*Other and not stated*	*Total*
Short-term movement—										
Under 1 week	73,093	931	22,292	1,226	5,664	35,997	1,258	37	5,203	145,701
1 week and under 2 weeks	3,512	3,275	21,801	1,934	9,240	40,633	536	189	4,524	85,644
2 weeks and under 3 weeks	1,388	1,969	11,674	1,049	14,498	31,636	220	330	3,679	66,443
3 weeks and under 1 month	173	532	3,189	420	14,726	16,667	76	238	1,741	37,762
1 month and under 2 months	..	..	6,676	736	29,154	24,808	434	440	4,219	66,467
2 months and under 3 months	..	..	2,299	392	13,422	9,542	360	581	2,290	28,886
3 months and under 6 months	..	..	2,422	576	23,138	15,442	2,394	3,950	4,114	52,036
6 months and under 9 months	..	..	956	607	9,136	5,593	3,034	768	1,623	21,717
9 months and under 12 months	..	..	639	590	1,918	2,963	5,164	4,486	1,943	17,703
Indefinite, not stated	..	..	956	298	2,200	2,605	1,839	313	2,113	10,324
Total short-term movement	*78,166*	*6,707*	*72,904*	*7,828*	*123,096*	*185,886*	*15,315*	*11,332*	*31,449*	*532,683*
Long-term movement—12 months and over	..	..	2,066	2,327	1,949	2,215	10,437	2,496	5,494	26,984
Total overseas visitors arriving	**78,166**	**6,707**	**74,970**	**10,155**	**125,045**	**188,101**	**25,752**	**13,828**	**36,943**	**559,667**

The average intended length of stay abroad of Australian residents departing in 1974 for short-term visits abroad was 71 days. The average intended length of stay in Australia by short-term visitors from overseas was 39 days. Of course, statistics for Australian residents refer to their total time away from Australia; for overseas visitors they refer only to the Australian portions of their trips.

In both cases, the majority of travellers are on holiday. A significantly higher proportion of overseas visitors are in Australia for the purpose of education, reflecting the number of students coming to Australia from South-East Asia.

Information about the countries of residence of short-term visitors, the countries of intended stay of Australian residents travelling overseas in the short-term, and intended lengths of stay, are of particular interest to the tourist industry.

OVERSEAS VISITORS ARRIVING BY COUNTRY OF RESIDENCE AND INTENDED LENGTH OF STAY, AND AUSTRALIAN RESIDENTS DEPARTING BY COUNTRY OF INTENDED STAY AND INTENDED LENGTH OF STAY: AUSTRALIA, 1974

	Overseas visitors arriving—intended length of stay						*Australian residents departing—intended length of stay*					
Country of residence (visitors) and country of intended stay (residents)	*Under 1 week*	*1 week and under 1 month*	*1 month and under 3 months*	*3 months and under 12 months*	*Indefinite, not stated etc.*	*Total*	*Under 1 week*	*1 week and under 1 month*	*1 month and under 3 months*	*3 months and under 12 months*	*Indefinite, not stated etc.*	*Total*
Africa—												
South Africa	1,363	1,117	993	564	30	4,067	30	653	1,380	1,182	84	3,329
Other	1,044	486	876	621	42	3,069	40	583	1,817	976	100	3,516
Total, Africa	*2,407*	*1,603*	*1,869*	*1,185*	*72*	*7,136*	*70*	*1,236*	*3,197*	*2,158*	*184*	*6,845*
America—												
Canada	2,631	6,827	4,101	3,354	203	17,116	..	1,830	3,075	1,910	191	7,006
United States of America	25,937	34,753	9,390	5,486	807	76,373	911	23,513	19,552	7,208	1,040	52,224
Other	946	996	532	555	145	3,174	30	1,190	2,074	1,909	113	5 316
Total, America	*29,514*	*42,576*	*14,023*	*9,395*	*1,155*	*96,663*	*941*	*26,533*	*24,701*	*11,027*	*1,344*	*64,546*
Asia—												
Hong Kong	2,021	2,981	2,012	1,413	102	8,529	1,580	15,573	3,270	1,008	405	21,836
India	708	831	375	549	39	2,502	90	970	1,761	566	65	3,452
Indonesia	1,743	1,256	1,417	2,399	126	6,941	713	10,293	4,806	1,912	293	18,017
Israel	125	176	550	284	31	1,166	30	300	1,703	938	72	3,043
Japan	11,294	9,436	1,614	1,343	185	23,872	301	6,595	4,059	620	202	11,777
Lebanon	18	112	216	248	18	612	10	120	352	4,442	164	5,088
Malaysia	1,653	2,101	1,699	2,826	78	8,357	661	17,632	3,176	1,650	426	23,545
Philippines	592	558	441	276	59	1,926	350	2,935	1,244	389	101	5,019
Portuguese Timor	417	92	40	216	6	771	430	2,148	209	90	50	2,927
Singapore	1,754	2,820	1,268	856	83	6,781	2,337	29,305	3,518	1,308	660	37,128
Thailand	506	748	380	408	51	2,093	301	3,970	1 012	397	98	5 778
Turkey (in Asia and Europe)	39	109	68	398	37	651	10	50	371	1 922	85	2 438
Other and unspecified	1 560	1 251	905	1 642	172	5 530	81	3,673	2,592	1,471	185	8,002
Total, Asia	*22,430*	*22,471*	*10,985*	*12,858*	*987*	*69,731*	*6,894*	*93,564*	*28,073*	*16,713*	*2,806*	*148,050*
Europe—												
Austria	359	257	240	414	15	1,285	..	110	1,197	1,213	59	2,579
France	1,471	1,026	750	495	54	3,796	..	561	1,766	1,598	86	4,011
Germany(*a*)	2,745	2,617	2,513	2,332	184	10,391	..	1,300	6,273	5,559	307	13,439
Greece	497	498	500	2,636	153	4,284	50	420	2,593	16,463	637	20,163
Hungary	33	164	116	260	12	585	10	40	733	878	44	1,705
Italy	1,021	1,085	1,376	3,111	191	6,784	131	1,472	8,728	23,177	768	34,276
Malta	14	44	117	300	10	485	10	70	671	3,286	92	4,129
Netherlands	1,851	1,137	2,161	2,161	63	7,373	10	740	4,700	4,541	178	10,169
Poland	33	176	157	431	31	828	..	60	851	1,676	49	2,636
Spain	456	227	127	152	52	1,014	20	120	900	2,120	114	3,274
Switzerland	1,420	911	884	546	54	3,815	40	463	1,730	1,149	82	3,464
United Kingdom and Ireland	14,427	14,312	19,785	22,266	865	71,655	301	8,659	59,058	53,616	2,477	124,111
U.S.S.R.	181	188	184	128	46	727	10	80	384	312	14	800
Yugoslavia	136	88	348	1,048	42	1,662	30	71	2,789	11,161	478	14,529
Other and unspecified	2,131	1,722	1,261	1,010	124	6,248	70	703	4,651	6,000	279	11,703
Total, Europe	*26,755*	*24,452*	*30,519*	*37,290*	*1,896*	*120,932*	*682*	*14,869*	*97,024*	*132,749*	*5,664*	*250,988*
Oceania—												
Fiji	2,036	2 086	1,121	1,669	71	6,983	3,918	33,509	1,590	702	814	40,533
New Caledonia	2,042	2,028	2,070	972	154	7,266	1,310	6,647	488	131	225	8,801
Papua New Guinea	5,778	7,730	9,868	6,709	208	30,293	4,883	9,264	5,002	4,578	452	24,179
New Hebrides	301	300	223	161	26	1,011	170	2,158	259	171	78	2,836
New Zealand	46,200	79,458	19,923	17,656	1,694	164,931	12,544	123,771	28,040	12,443	3,578	180,376
Norfolk Island	180	337	190	32	25	764	750	7,920	416	182	234	9,502
Other	1,226	744	556	840	61	3,427	412	2,112	918	456	108	4,006
Total, Oceania	*57,763*	*92,683*	*33,951*	*28,039*	*2,239*	*214,675*	*23,987*	*185,381*	*36,713*	*18,663*	*5,489*	*270,233*
Other—												
Total, Other	*6,812*	*6,064*	*4,006*	*5,521*	*1,143*	*23,546*	*1,942*	*11,800*	*7,453*	*6,201*	*1,592*	*28,988*
Total	**145,701**	**189,849**	**95,353**	**94,288**	**7,492**	**532,683**	**34,516**	**333,383**	**197,161**	**187,511**	**17,079**	**769,650**

(*a*) Comprises the German Democratic Republic and the Federal Republic of Germany.

AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY BY OCCUPATION AND SEX: AUSTRALIA, 1974

Occupational group	*Short-term movement*			*Long-term movement*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
Professional, technical and related workers	71,435	45,706	117,141	7,444	5,525	12,969
Administrative, executive, and managerial workers	84,530	12,728	97,258	3,078	510	3,588
Clerical workers	19,671	53,065	72,736	1,794	5,935	7,729
Sales workers	18,624	10,121	28,745	1,085	578	1,663
Farmers, fishermen, hunters, timber getters, and related workers	12,059	1,570	13,629	562	41	603
Miners, quarrymen, and related workers	1,286	10	1,296	190	..	190
Workers in transport and communication	15,422	2,863	18,285	1,131	234	1,365
Tradesmen and production-process workers	51,004	6,520	57,524	5,611	487	6,098
Labourers (*a*)	17,534	942	18,476	1,901	46	1,947
Service (protective and other), sport, and recreation workers	14,471	12,803	27,274	2,235	1,007	3,242
Occupation inadequately described or not stated	10,791	7,331	18,122	853	639	1,492
Persons not in the labour force—						
Children and students	62,751	61,805	124,556	8,316	7,811	16,127
Other	21,262	153,346	174,608	613	8,602	9,215
Total	**400,840**	**368,810**	**769,650**	**34,813**	**31,415**	**66,228**

(*a*) Labourers (so described) not elsewhere classified, and freight handlers, including waterside workers.

CHAPTER 30

THE TERRITORIES OF AUSTRALIA

The internal Territories of Australia are the Northern Territory and the Australian Capital Territory. External Territories under the control of Australia are: Norfolk Island; the Territory of Heard and McDonald Islands; the Australian Antarctic Territory; the Territory of Cocos (Keeling) Islands; and the Territory of Christmas Island. There is also the Territory of Ashmore and Cartier Islands, deemed to form part of the Northern Territory.

Information on all Territories except Ashmore and Cartier Islands is contained in the following pages, and details of the acquisition of all the Territories will be found on pages 5, 22, and 23 of Chapter 1. More detailed statistics and additional descriptive matter are to be found in the Annual Reports of the Administrations of the various Territories and in the *Northern Territory Statistical Summary* (1.6) and the *Australian Capital Territory Statistical Summary* (1.7) issued by this Bureau. Statistics for the Northern Territory and the Australian Capital Territory are also included in chapters dealing with particular subjects.

THE NORTHERN TERRITORY

General description

Area

Upon the extension of New South Wales westwards to the 129th east meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 it was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1 January 1911. The total area is 1,346,200 square kilometres.

Legislation and administration

On 1 January 1911 the Territory was transferred from South Australia to the Commonwealth. The terms were outlined in Year Book No. 15, page 940.

The *Northern Territory (Administration) Act* 1910 provides for an Administrator, appointed by the Govenor-General, to administer the Territory on behalf of the Commonwealth Government.

In 1974 the Act was amended to provide for the establishment of a Legislative Assembly for the Northern Territory to make Ordinances for the peace, order and good government of the Northern Territory. The Assembly consists of 19 elected members including a Speaker elected by the members. The first meeting of the new Assembly was held on 20 November 1974. The Assembly replaces the Legislative Council for the Northern Territory, which held its last meeting on 26 September 1974, and consisted of 6 official members and 11 elected members with a President elected from among the elected members.

Ordinances passed by the Legislative Assembly are presented to the Administrator for assent. The Administrator is required by the Act to reserve Ordinances relating to certain matters, including Crown Lands and the Aboriginal inhabitants of the Territory, for the Governor-General's pleasure; others he may assent to, withhold assent from or return to the Legislative Assembly with recommended amendments. The Governor-General may, within six months, disallow any Ordinance assented to by the Administrator and, in respect of an Ordinance reserved for his pleasure, he may assent, withhold assent, withhold assent to part of the Ordinance and assent to the remainder or recommend to the Administrator any amendments to the laws of the Territory that he considers desirable arising out of his consideration of the Ordinance. Ordinances passed by the Legislative Assembly, whether assented to or withheld partially or in full from assent, are to be laid before each House of Parliament as soon as practicable.

The Act also provides for an Administrator's Council to advise the Administrator on any matter referred to it, either by the Administrator or in accordance with the provisions of any Ordinance of the Territory. The Administrator's Council consists of the Administrator and 5 members of the Assembly.

The Territory elects one member to the House of Representatives and, since 1975, two Senators to the Senate.

There is a Commonwealth Department of the Northern Territory which carries out the day to day administration of the Territory together with other Commonwealth Departments—Attorney-General's, Health, Education and Aboriginal Affairs—and Territory Departments of the Administrator and the Legislative Assembly.

While the Legislative Assembly has legislative powers it does not have executive powers. The Government's objective is progressively to confer executive responsibility on the Legislative Assembly to advance the Territory to Statehood.

Following the devastation of Darwin by Cyclone Tracy on Christmas Day 1974, Australia's greatest natural disaster, the Darwin Reconstruction Commission was established by the Commonwealth Government for the purpose of rebuilding Darwin.

The Northern Territory has two Local Government Councils; the Corporation of the City of Darwin, established in 1957, and the Corporation of the Municipality of Alice Springs, established in 1971. The Darwin Corporation consists of the Mayor and 10 Aldermen and the Alice Springs Corporation consists of the Mayor and 8 Aldermen. Town Management Boards are established in Katherine and Tennant Creek, each consisting of 5 elected members and 4 members appointed by the Administrator. The function of each Board is to advise the Administrator on local matters.

The remaining centres of the Territory are administered under mining leases, by Aboriginal community councils, by church missions or directly by the Department of the Northern Territory,

Nhulunbuy township is administered under lease by the Nhulunbuy Corporation, a subsidiary company of Nabalco Pty Ltd, which conducts a large bauxite mining operation on Gove Peninsula. The Company employs a Town Administrator and the Government is represented by a Departmental Officer. A similar arrangement applies to mining operations on Groote Eylandt.

Physical geography

The Territory is within the torrid zone, with the exception of a strip about 300 kilometres wide which lies south of the Tropic of Capricorn.

The low flat coastline seldom reaches a height of 30 metres. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and laterite form the occasional cliffy headlands. The coastline of 6,200 kilometres is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries. The only practicable deep-water port for general use, however, is Darwin.

Inland the country generally is devoid of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the seventeenth or eighteenth parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply for the interior system. Towards the centre of the continent the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

Climate, fauna and flora

There are two main climatic divisions, the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly all the rainfall occurs in the summer months.

The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous), and frogs abound. There are many varieties of fresh-water fish and littoral Mollusca. Butterflies and beetles are strongly represented. The termite is a pest which is capable of serious damage to wooden buildings unless special preventive measures are taken. Mosquitoes and sandflies are very troublesome in the "top end" particularly in the wet season. Most types of native fauna are protected and buffaloes exist in large herds on the northern coastal plains.

The vegetation is north Australian in type but a number of forms belong to the Malayan and Oceanic regions. The climate and generally poor soils associated with it give rise to tropical savannah vegetation, with the size and volume of woody material present being closely related to rainfall and the quality of the forests decreasing strikingly as one proceeds inland from the northern coastline. In the north, cypress pine which is termite resistant, ironwood, bloodwood and paperbark timbers are cut and milled for local building purposes. Further inland, particularly on the Barkly Tableland and parts of the Victoria River district, there are better grazing grasses and some shrubs, while the wide belt of sandy plain between the Barkly Tableland and the ranges in the Alice Springs area, carries mainly spinifex grass and low scrub. The plains of the Alice Springs district carry chiefly an acacia scrub known as mulga, spinifex and other sparse grasses. The principal families represented in the interior are *Gramineae*, *Chenopodiaceae*, *Compositae* and *Mimosaceae*.

Population

See also the chapters Population and Vital Statistics.

The population of the Northern Territory at the census of 30 June 1971, was 48,627 males, 37,763 females, 86,390 persons. These figures include an Aboriginal and Torres Strait Islander population of 11,774 males, 11,607 females, 23,381 persons. A total of 4,004 Aborigines were enumerated in urban areas of the Territory, the remainder were enumerated in areas classified as rural. While some Aborigines choose to live on reserves, a large area of reserved land (about 244,000 square kilometres) has been maintained to provide economic resources from which the Aborigines may benefit either directly or from royalty payments.

Aboriginal Affairs

Policy

Policy statements in recent years have been moving away from specific definitions such as 'assimilation' to a more open-ended approach in which the underlying principle is now self-management and self-sufficiency incorporating Aboriginal involvement in all stages of the development and implementation of policy.

In general, the Government aim is to remove legal, social and economic discrimination against Aborigines, and to provide opportunities to restore their lost power of self-determination in these areas.

Legal status

As Australian citizens Aborigines are entitled to equality before the law. The Department of Aboriginal Affairs and other Commonwealth government departments and agencies, for the purpose of administering various programs designed to benefit Aborigines, define an 'Aboriginal' or 'Torres Strait Islander' as a person of Aboriginal or Islander descent who identifies as an Aboriginal or Islander and is accepted as such by the community with which he is associated.

Special schools for Aborigines

The special schools for Aborigines were combined with the community schools in February 1973.

Land

There are 353 separate Aboriginal reserves in Australia, comprising about 541,300 square kilometres of which 244,000 are located in the Northern Territory.

Early in 1973 Mr Justice A. Woodward was appointed as sole Commissioner to enquire into Aboriginal land rights in the Northern Territory and to advise the Commonwealth Government. The final report of the Commission, issued in May 1974, recommends that land be vested in Aboriginal communities in fee simple and makes recommendations on a number of related matters.

At present, royalties from the mineral and timber activities carried on within reserves are paid into the Aborigines Benefits Trust Fund, established in 1952. Loans or grants are made from the fund to any Aboriginal or group of Aborigines in the Northern Territory on the advice of a special advisory committee which has an all Aboriginal membership. Moneys in the fund are used for a wide variety of purposes which benefit the Aboriginal people.

Aboriginal communities are also being assisted to purchase land off reserves, and a number of properties have been bought with Government assistance. An Aboriginal land fund has been established for this purpose. The nature of the fund and its use will alter slightly if legislation giving effect to Aboriginal land rights is passed by Commonwealth Parliament.

Community services and affairs

Government policy in the administration of Aboriginal affairs is to work as far as possible through existing State and Commonwealth Government departments and instrumentalities, and the Department of Aboriginal Affairs has primarily a policy planning and co-ordinating role. Responsibility for a variety of community services on Aboriginal reserves and in Aboriginal communities in the Northern Territory is being transferred from the Northern Territory Division of the Department to other appropriate authorities. The Departments of Education, Health, and Northern Territory have assumed full responsibility for education, health, and social welfare services respectively in Aboriginal communities in the Northern Territory, and for a number of other functions such as town services on reserves.

Special programs for Aborigines

To meet the needs of Aboriginal people throughout Australia the Commonwealth Government has developed, on a national basis, a variety of programs in fields such as health, education, housing, employment and vocational training, special works, regional projects and economic enterprises.

Attention is being given to changing the institutional character of Aboriginal reserve communities. Supervisory staff are being replaced by community development advisors, and managerial and technical staff are being replaced by consultants and workers employed by the communities themselves. Programs are designed to encourage and strenghten the capacity of Aborigines to manage their own affairs, to increase their economic independence, and to reduce existing social and other handicaps facing them. The Government is also able to support and encourage Aboriginal initiative by responding directly to individual communities which wish to develop their own social or economic projects. Grants may be made to communities to enable them to improve community facilities and amenities, and to help them to establish economic enterprises.

The Government policy is to provide Aboriginal primary school children in Aboriginal communities with education in their own languages as far as practicable. Bilingual education programs were initiated in five schools in Northern Territory Aboriginal communities in 1973 as a first step in implementing the new policy.

Production

See also the chapters dealing with particular subjects.

Land tenure

Nearly 60 per cent of the total area of land in the Northern Territory is held under various forms of lease or licence which are described hereunder. The remainder comprises unoccupied and unreserved areas (22.98 per cent), reserved (19.75 per cent) and freehold (0.06 per cent).

The Commonwealth Government has for some time been conducting a comprehensive review of pre-existing policies affecting land tenures and the interests of Aborigines in land holding. An enquiry into Aboriginal land rights was held by Mr Justice Woodward, who made a report to the Commonwealth Government in April 1974. Legislation arising from the report is to go before Parliament in 1976.

A Commission of Inquiry into Urban Land Tenures was also established, under the chairmanship of Mr Justice Else-Mitchell, and in November 1973 a first report was made. Various government Departments have studied the Report, and further submissions have been made to the Commission. A second and final report is expected to be presented to Commonwealth Parliament in 1976.

The various forms of lease or licence of lands are as follows:

Pastoral leases —granted for periods not exceeding 50 years.
Agricultural leases —granted in perpetuity over areas generally limited to a maximum of 40,470 hectares approximately.
Leases of town lands —granted in perpetuity.
Special purposes leases—granted for a term of years or in perpetuity, for purposes other than pastoral, agricultural or mining, or private residential purposes within a town.
Church lands leases —granted for church purposes at a nominal rent in perpetuity.
Miscellaneous leases —granted for any prescribed or approved purpose, for a term of years or in perpetuity.
Grazing licences —granted to graze stock on Crown Lands for periods not exceeding one year.
Occupation licences —granted for manufacturing, industrial or any prescribed purposes for periods not exceeding five years.
Miscellaneous licences —granted for periods not exceeding one year.

With the exception of leases within the Darwin Town Area or a municipality, which are granted at nominal rentals (10 cents per annum if and when demanded), the foregoing leases and licences are granted at specified rentals or rentals fixed by the Administrator and subject to reappraisement, and under various prescribed or specified conditions.

Pastoral and agricultural industries

Beef cattle production is the major rural industry in the Northern Territory. The beef industry has been characterised throughout its history by a slow rate of expansion due to the poor quality of native pastures and unsatisfactory market outlets. Developments in pasture improvement and the use of adapted Zebu cross-cattle in the northern areas, the opening in 1963 of the export abattoirs in Katherine and Darwin, better disease control coupled with better management techniques, and various incentives and research programs introduced by the Government to encourage developments of the pastoral industry, have resulting in an increase in turnoff figures and value of production during the late 1960's and early 1970's.

In the last 2 years markets for beef have been poor with prices lower than in previous years. Coupled with this, the closure of the Darwin abattoirs, has caused a depreciation in the buoyancy of the beef industry in the Northern Territory. Northern Territory cattle have also been affected by restricted overseas markets. The value of production and the numbers of cattle turned-off, have consequently fallen. This reduction of the market and favourable seasonal factors have resulted in a marked increase in the cattle population.

The expected increase in the commercial production of grain sorghum has so far occurred on only a few properties. Grain sorghum requires arable land and a considerable capital input. Sorghum is still at an early stage of testing; nevertheless, it promises to provide a more capital intensive primary industry.

Animal production has continued to be augmented by the buffalo meat industry. Interest in domestication has been developed on the sub-coastal plains properties and will need to continue if this industry is to be further advanced. Through the development of more intensive cattle production, utilising improved pastures, tropical legume seed production has received considerable impetus. Both the pig and poultry industries, unaffected by overseas marketing, have continued to expand.

Increasing private investment in rural development is leading to greater pressures upon the Government for extension services and research. The work of C.S.I.R.O. and the Department of the Northern Territory research stations and experimental farms is providing the basis for continuing rural development. As new knowledge is being gathered it will be followed by testing on farm scale. The research institutions in existence in the Northern Territory are as follows.

Arid Zone Research Institute—Alice Springs. With the completion of the new research laboratory in 1967 more emphasis is being placed on arid zone research in the 'Centre' and the need to conserve valuable pastoral lands while achieving maximum productivity. Fields of work at the Institute include animal health, agriculture, soil conservation, botany, animal production and range management.

Coastal Plains Research Station. The station has 3 main roles, one as a regional station examining suitable pasture and animal production systems in the Coastal Plains/Darwin area, the second involving basic studies into breeding and breeds with wider implications and the third as the major centre for rice research. Its efforts have been largely devoted to the animal breeding investigations with some attention being paid to the development of improved pasture systems, including establishment, maintenance and the reaction to various grazing rates. Breeding trials are being conducted with Santa Gertrudis, Brahman and Africander cross-breds, and Shorthorns. Banteng cattle are being studied as a source of tropical blood for breeding cattle adaptable to Territory conditions and a small herd of cross-bred cattle has now been developed. Buffalo/Brahman comparison studies are also being undertaken.

Victoria River Experiment Station. This is the only Government Experiment Station in the rangelands of the Northern Territory. Work is being undertaken on genetic improvement of the local breed of Shorthorn cattle, evaluation of improved pastures, supplements, breed comparisons and range management studies.

Upper-Adelaide River Experiment Station. The station is mainly concerned with regional investigations of pasture and animal production for the Marrakai area including stocking rates on improved and native pastures, comparison studies of improved pastures and testing of new potential pastures, management of pastures on flood plains and feeding supplementation trials.

Berrimah Experiment Farm. The work of this farm has been mainly restricted to pasture and fodder crop investigations, plant introduction, sorghum breeding, fruit, vegetable and weed control trials and intensive animal studies.

Katherine Experiment Farm. This farm services the southern part of the Daly River Basin and has a larger component of cropping work than other stations. Work being conducted includes utilisation of Townsville stylo, pasture improvement and management, sorghum, peanut, guar, cowpea and bulrush millet trials and various aspects of cattle management.

Douglas-Daly Experiment Station. This station is concerned with developing animal production systems for the higher rainfall part of the Daly River Basin including evaluation of pastures under grazing/stocking rates, supplementary feeding, use of fertilisers, pasture establishment, and pasture/animal production trials.

Other research sites. Research and trials are also being conducted at selected sites on maize, soybeans, sorghum, peanuts, *Stylosanthes spp.* and weed control.

NORTHERN TERRITORY: AREA AND PRODUCTION OF CROPS

Crop		*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
		AREA(*a*) (hectares)				
Fruit—Bananas		(*c*)	31	21	20	11
Pineapples		(*c*)	9	6	8	(*c*)
Other		49	48	43	34	21
Total fruit		*49*	*88*	*70*	*62*	*32*
Peanuts		23	40	13	23	(*c*)
Sorghum for grain		1,309	5,638	11,032	3,990	4,235
Vegetables for human consumption		102	160	170	182	131
Other crops(*b*)		856	1,434	823	721	3,620
Grand total(*a*)		**2,339**	**7,360**	**12,108**	**4,978**	**8,018**
		PRODUCTION				
Fruit—Bananas	tonnes	170	228	242	274	138
Pineapples	„	(*d*)	12	16	21	3
Peanuts	„	15	44	. .	3	. .
Sorghum (grain)	„	1,525	13,806	17,041	6,674	6,784

(*a*) Excludes rice; details are not available for publication. (*b*) Principally fodder crops. (*c*) Not available for publication, included in Other crops. (*d*) Not available for publication.

NORTHERN TERRITORY: LIVESTOCK
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31 March—	*Horses*	*Cattle*	*Sheep*	*Pigs*
1972	(*a*)	1,166	7	5
1973	(*a*)	1,237	3	7
1974	(*a*)	1,321	1	8
1975	(*a*)	1,434	1	7
1976	28	1,603	1	7

(*a*) Not collected.

Mining

During 1974–75 the mining industry continued to be the major contributor to the income of the Northern Territory. Mineral output was valued at $80 million in 1972–73, at $126 million in 1973–74 and at $139 million in 1974–75.

The main minerals produced during 1974–75 were bauxite (including the production of alumina) on the Gove Peninsula, manganese from Groote Eylandt and gold, copper and bismuth from Tennant Creek. Production of iron ore ceased in December 1974, after cyclone Tracy severely damaged the ore loading facilities at the port of Darwin.

A bauxite mining and treatment plant is operated at Gove by Nabalco. Bauxite, including alumina production, was valued at $62,486,616 in 1974–75. Of the bauxite produced 2,329,022 tonnes or 56 per cent was fed into the alumina plant, while of the remaining 1,848,959 tonnes (44 per cent), 875,971 tonnes were exported to Japan.

The production of manganese from the extensive deposits at Groote Eylandt supplies all Australia's requirements of metallurgical grade managanese ore. Approximately half of the manganese produced during 1974–75 was exported to Japan with smaller amounts exported to Europe, the U.S.A. and South Korea. Total shipments from Groote Eylandt amounted to 882,106 tonnes of lump ore and 569,806 tonnes of fines.

Most of the Northern Territory ore production is exported to Japan with the U.S.A. and various European countries being the other main buyers of Northern Territory ores.

Most of the Northern Territory gold and copper production is obtained from the copper-gold ores of the underground mines of Peko-Walsend Ltd at Tennant Creek. Currently (since February, 1975) only those mines producing ores with a high gold content are in operation, due to the unfavourable world prices for copper. The flash smelter for the production of blister copper, which commenced operations in Tennant Creek in December 1973 suspended operations in February 1975 while copper prices remain low.

The uranium ore deposits discovered in the Alligator Rivers area, about 240 kilometres east of Darwin (Ranger, Nabarlek, Jabiluka and Koongarra, to name the major finds), are still subject to environmental inquiries.

In the McArthur River District a pilot plant has been established to develop an economic ore treatment method for the extensive, low-grade, but extremely finely disseminated, lead-zinc sulphides deposits, which pose a major dressing problem.

NORTHERN TERRITORY: MINING ESTABLISHMENTS

		1972–73	*1973–74*	*1974–75*
Establishments operating end of June	No.	15	15	15
Persons employed(*a*)	No.	1,473	1,495	1,180
Wages and salaries	$m	10.8	12.9	15.9
Turnover	$m	66.0	87.7	91.6
Opening stocks at 30 June	$m	8.3	7.8	12.5
Closing stocks at 30 June	$m	7.8	12.4	17.5
Purchases, transfers in and selected expenses	$m	16.4	22.0	27.4
Value added(*b*)	$m	49.1	70.2	69.2
Fixed capital expenditure(*c*)	$m	10.3	6.2	14.7

(*a*) At end of June. Includes working proprietors. (*b*) Turnover plus increase (or less decrease) in the value of stocks less purchases, transfers in and selected expenses. (*c*) Outlay on fixed tangible assets less disposals.

Petroleum and natural gas

Off-shore operations represented the main activity in petroleum exploration during 1974–75. At 30 June 1975, there were 5 oil permits covering 126,428 square kilometres, 2 oil licences covering 593 square kilometres and 14 exploration permits covering 2,246 blocks. Two oil leases covering 280 square kilometres are under application.

During 1974–75, seven off-shore wells were completed with the Sunrise No. 1 well having shows of gas. No wells were drilled on-shore during 1974–75.

Forestry

Forestry activities in the Northern Territory commenced in 1959 when the Forestry and Timber Bureau established a northern regional station in Darwin. In the same year the Legislative Council of the Northern Territory passed a Forestry Ordinance to regulate the harvesting of forest produce and the management of forests. Activities during the first 10 years were largely devoted to assessing the native forest resource, establishing species trials to determine what species were suitable for plantation establishment and examining the silviculture of native forests. Some forest development work was carried out under the terms of two Cabinet approvals. This work mainly took place within Aboriginal reserves in order to provide employment for Aborigines and included plantation establishment, the protection of native forests from fire to encourage regeneration and the training of Aborigines in sawmilling.

In 1970 a new five year forest development program was commenced which expanded forestry activities both within Aboriginal reserves and in forest reserves and potential forest reserves. It has been estimated that 75 per cent of the potentially productive forest land in the Northern Territory occurs within Aboriginal reserves.

The program provides for the extension of fire protection and forest management activities within cypress pine and other native forest in Arnhem Land and on Melville Island. A major objective of the program is to provide fire protection and forest management to 40,000 hectares of mixed cypress pine forest within Arnhem Land. The program also provides for the setting aside of forest areas to be managed for multiple use purposes including timber production, recreation and the protection of soil and water sheds. The annual establishment of 400 hectares of coniferous plantation is included in the present program. Forest assessment activities are to be continued and fire control activities are to be expanded within forestry, pastoral and agricultural areas as well as tree planting activities for conservation in the arid zone. The development of a second 5 year forestry development program due in 1976 has been delayed in the aftermath of Cyclone Tracy and uncertainty concerning the final format of Aboriginal Land Rights Legislation.

The consumption of sawn timber in the Northern Territory during 1973–74 was estimated at 25,000 cubic metres. It is not possible to obtain accurate statistics because of the substantial, but unknown quantity of sawn timber which enters the Northern Territory by road. Local production during 1973–74 was 900 cubic metres. Timber consumption following Cyclone Tracy, remained at approximately the same level as in previous years.

The effects of Cyclone Tracy on the Forests Resource of the Territory was minor. Forests in the land in the immediate Darwin environs were extensively damaged but these forests have value only in the aesthetic sense. Damage was restricted to a band some twenty kilometres wide reaching fifty kilometres inland.

Resource investigations have shown there are three areas within the Northern Territory with significant pulpwood resources which may be suitable for exploitation. These areas are within the present Aboriginal reserves. There has been some interest by Japanese paper industries in the past, and it is likely that this will increase in the next decade due to the rapidly increasing Japanese demand for paper and paper products.

The tropical *Eucalyptus* forests in the Northern Territory are comparatively low in timber productivity per unit area. Forest policy within the Northern Territory provides for multiple use management where feasible in order to optimise other forest values including soil and water conservation, forest recreation, grazing and the conservation of flora and fauna. The financial yields from forest areas can be increased through this form of management.

The total revenue derived from the forest is related to the levels at which royalties and fees are set. In principle, direct forest revenues should be adequate for the establishment, management and protection of the forest area. The forests provide renewable resources on which industries can be based and which will develop substantially greater income than direct revenues from the forest.

Fishing

Following preliminary surveys which indicated the existence of valuable prawn resources off the Northern Territory coast, prawning operations were approved in 1968 in waters adjacent to the Territory. Two prawning companies are now operating, both of which are joint Australian-Japanese ventures. One prawn processing plant is in operation in Darwin and another operates on Groote Eylandt. Boats and equipment valued at $24 million were based in the Northern Territory in 1974–75. During 1974–75, 2.1m kilograms live weight of prawns were caught by Northern Territory prawning ventures. The Territory exported 0.8m kilograms (processed weight) valued at $2.45 million. The other main fishery in the Territory is that based on barramundi in estuaries and inshore areas. This species also provides good sport fishing in inland areas. Commercial catches of barramundi totalled 194,000 kilograms (filleted weight) for the calendar year 1975.

NORTHERN TERRITORY: PRINCIPAL FISHERIES

		1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Prawns—						
Estimated gross weight of prawn catch	tonnes	4,108	2,629	2,584	3,998	2,060
Gross value of prawns	$'000	3,083	2,562	4,005	5,791	3,080
Fish—						
Estimated live weight of fish catch	tonnes	253	391	619	846	781
Gross value of fish	$'000	139	191	380	749	613
All fisheries—						
Number of boats engaged		127	130	163	276	194
Number of men employed		542	532	561	788	638

Secondary Industries

The types of secondary industries that have developed in the Northern Territory have been largely service industries based on demand for local markets together with the processing of primary production for export including the processing of mined ores, prawns and beef. The isolation of the Northern Territory from the major population areas of Australia and the resultant high transportation costs make other than local market expansion difficult. However such isolation also provides a protected market for some aspects of secondary industry.

The extent of importation of commodities into the Northern Territory, significant underdeveloped raw resources and a growing population (and hence market) would suggest that potential exists for industrial expansion. Some see the proximity of South East Asian markets to Darwin as providing considerable future potential for export orientated secondary industry development.

In recent years, the effects of Cyclone Tracy on the City of Darwin, the general downturn in economic activity in the Australian economy, and the beef industry slump have had a significant effect on secondary industry in the Northern Territory. Some rapid growth in secondary industry associated with the building industry in Darwin has occurred, but growth in other areas is largely dependent on improvement in the general economic climate.

The following table shows preliminary results of the Manufacturing Censuses taken in respect of the years 1973–74 and 1974–75.

NORTHERN TERRITORY: MANUFACTURING ESTABLISHMENTS

		1973–74	*1974–75(a)*
Establishments at 30 June	No.	102	68
Persons employed(*b*)	No.	2,450	2,308
Wages and salaries	$m	18.0	22.0
Turnover	$m	87.0	94.7
Opening stocks at 30 June	$m	16.6	17.6
Closing stocks 30 June	$m	26.0	34.1
Purchases, transfers in and selected expenses	$m	45.8	61.4
Value added(*c*)	$m	50.6	49.8

(*a*) From 1974–75 all manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed. (*b*) Average over whole year. Includes working proprietors. (*c*) Sales, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Tourism

Tourism has become one of the Territory's major industries in recent years and is likely to play an increasingly important role in the Territory's economy. Prior to Cyclone Tracy the industry had sustained growth rates of the order of 12 per cent per annum. In 1971, visitors numbered 112,800; with 12,000 of these coming from overseas. Ayers Rock provides the most reliable long-term visitor figures which show that from a visitor total of 5,000 in 1961, numbers have increased to 38,000 in 1971, and to 54,000 in 1975. Despite the setback in the Top End suffered as a result of Cyclone Tracy, the industry there already shows signs of resurgence, while the Centre has experienced continued growth.

In 1974–75 the Northern Territory Tourist Board spent $530,770 in development of the industry. Bureaux are currently in operation in Sydney, Melbourne, Adelaide, Darwin and Alice Springs.

Action is under way for a detailed study of the Territory's tourist industry and tourist potential to identify future development options and evaluate these in terms of implications for the Northern Territory economy, its people and the environment. This is seen as necessary to provide a framework for possible future private and government planning and investment covering not only the tourist industry but general urban and regional development in the Territory, given the major role that tourism could play in this.

National Parks and Reserves

About 43,000 square kilometres have been set aside as wildlife sanctuaries under the Wildlife Conservation and Control Ordinance. They are controlled by the Chief Inspector of Wildlife who is an officer of the Department of the Northern Territory. Wildlife protected areas total 236,000 square kilometres, the bulk of which consists of Aboriginal reserves.

The Northern Territory Reserves Board administers some 37 national parks and reserves covering an area of over 249,926 hectares. The Board is responsible under the National Parks and Gardens Ordinance for the care, control and management of these reserves, and its functions include the preservation and protection of natural and historical features and the encouragement of public use and enjoyment of land set aside in such reserves.

Trade, transport and communication

Trade

No comprehensive record is kept of the trade between the States and the Territory. The following table shows the values of the principal commodities imported into and exported from the Northern Territory from or to overseas countries.

NORTHERN TERRITORY: PRINCIPAL OVERSEAS IMPORTS AND EXPORTS
($'000)

Commodity	*1971–72*	*1972–73*	*1973–74*	*1974–75*	*1975–76*
		IMPORTS			
Petroleum and shale spirit—					
Automotive spirit	1,108	1,399	192	3,801	4,786
Automotive distillate	1,437	1,185	1,507	3,772	3,780
Furnace fuel	1,847	2,233	8,505	13,407	19,332
Other(*a*)	2,124	1,732	129	2,441	6,662
Chemical elements and compounds	2,887	3,282	2,144	7,760	6,834
Timber	546	771	1,235	1,754	1,887
Machinery and transport equipment(*b*)	9,049	32,827	17,579	7,332	7,314
Other articles	6,868	6,161	7,141	8,628	8,564
Total imports	**25,866**	**49,590**	**38,432**	**48,895**	**59,159**
		EXPORTS(*c*)			
Meats	5,744	7,375	6,047	2,698	2,076
Fresh prawns and shrimps	4,853	4,479	4,162	3,140	3,005
Iron ore and concentrates	. .	5,656	4,939	1,549	606
Other metalliferous ores and metal scrap	22,901	22,918	27,149	37,379	53,825
Inorganic chemicals elements metallic oxides, etc.	52	22,258	35,775	56,786	83,374
Ships, boats and floating structures	8,230	14,881	3,185	11,519	322
Other articles	7,463	18,131	5,525	3,993	8,643
Total exports	**49,243**	**95,698**	**86,782**	**117,064**	**151,851**

(*a*) Includes industrial and marine diesel fuel, oil for use as refinery stock, etc. (*b*) Includes value of oil search equipment (floating structures, etc.) which were brought to the Northern Territory for temporary operation and moved overseas after the planned exploration activities were completed. (*c*) Includes domestic exports and re-exports.

Railways

The Australian National Railways operates the Central Australia Railway from Port Augusta in South Australia to Alice Springs over a distance of 1,226 kilometres of which about 322 kilometres are in the Northern Territory. The line is standard gauge from Port Augusta to Marree, a distance of 357 kilometres and narrow (1,067 mm) gauge from Marree to Alice Springs. The Commonwealth Government has approved the construction of a standard gauge line between Tarcoola and Alice Springs, to replace the Marree–Alice Springs section of the Central Australia Railway and survey work has commenced. The Australian National Railways also operates the North Australia Railway between Darwin and Birdum on a narrow (1,067 mm) gauge over a distance of 510 kilometres. The two inland terminals, Alice Springs and Birdum are about 1,014 kilometres apart and are connected by road transport along the Stuart Highway. Larrimah, on the highway and 10 kilometres north of Birdum, is the point of trans-shipment for passengers and goods and is, at present, the effective terminal. A road-rail freight service operates between Adelaide and Darwin via Alice Springs.

Roads

The Stuart Highway is the principal north-south axis route for the Northern Territory connecting Alice Springs, Katherine, Tennant Creek and Darwin to Adelaide. The section Darwin–Alice Springs is 1,535 kilometres long and sealed over its full length. The section south of Alice Springs is sealed for 207 kilometres to Erldunda with work proceeding to seal the remainder as far as the border with South Australia. This is expected to be completed by December 1976.

The Barkly Highway is the principal route to and from Queensland via Mt. Isa. It is 648 kilometres long and is sealed. Running approximately east–west it connects to the Stuart Highway some 26 kilometres north of Tennant Creek.

The Victoria Highway, the principal access route to and from Western Australia via Kununurra, is 467 kilometres long and is sealed.

These highways are used to carry the various freight including cattle, particularly between the railheads of Mt. Isa, Alice Springs and Larrimah. They provide access to meatworks at Wyndham (Western Australia), Cloncurry (Queensland) and Katherine. In addition they play a particularly important part in the Northern Territory economy in their association with the tourist industry.

The first of a number of programs for upgrading the Stuart and Barkly Highways is nearly complete and a second has been approved by Parliament.

The fourth principal Northern Territory road is the Arnhem Highway which has been sealed for 210 kilometres. It commences some 34 kilometres south of Darwin at the Stuart Highway and leads eastwards to the uranium exploration and development areas of the Alligator Rivers district.

Development roads serving the more remote outback communities have received attention. At 30 June 1975 there were 19,962 kilometres of roads in the Northern Territory. These comprise 4,534 kilometres sealed, 1,597 kilometres gravel, 4,762 kilometres formed and 9,069 kilometres unformed.

Shipping

Shipping services to Darwin are provided from the eastern states by the Australian National Line using one vessel on a six weekly service and from Western Australia by West Australian State Shipping Service using three vessels providing three services a month. Tankers from Australian and overseas ports deliver oil products to Darwin. General cargo vessels from overseas ports also visit Darwin. The prawning and fishing industry accounts for a significant portion of the shipping entries into the port.

John Burke Pty. Ltd. operates a regular shipping service from Brisbane to the Gulf of Carpentaria ports which serves Aboriginal communities as well as the mining centres of Melville Bay (Gove) and Milner Bay (Groote Eylandt). Other shipping services to Milner Bay and Melville Bay bring supplies for the mining operation and bulk carriers load ore and other mining products for delivery to ports in Australia and overseas.

Powered barges provide services from Darwin to Aboriginal communities and ports along the coast.

Air services

At 1 January 1976, there were 127 aerodromes in the Territory, six of which are maintained by the Australian Department of Transport, Air Transport Group. Following the destruction by Cyclone Tracy of the facilities for international passengers in the Darwin terminal building, overseas passenger flights ceased. The Merpati Nusantara service (Darwin to Kupang) resumed during 1975 and on 31 March 1976, Qantas re-introduced a service to Hong Kong and London. Regular internal services to Darwin, with, in some cases, intermediate stops at Territory centres, are operated by Trans-Australia Airlines and Ansett Airlines (from Adelaide, Sydney, Melbourne and Brisbane), and MacRobertson-Miller Airways Ltd (from Perth). Connair Pty Ltd operate a network of air services throughout the Territory, the company's base being at Alice Springs, in addition, MacRobertson-Miller Airways Ltd operate from Darwin to Gove and Alice Springs. The Northern Territory Aerial Medical Service has aircraft based at Darwin, Gove and Alice Springs, whilst the Royal Flying Doctor Service operates from Alice Springs. Charter services are available at a number of centres including Darwin, Alice Springs, Katherine, Tennant Creek, Gove and Groote Eylandt.

Posts, telegraph, telephones, radio and television

Postal communication is maintained by road, rail and air transport between major Northern Territory towns and the capital cities of Australia. Large centres receive surface mails by two major road mail services operating via Alice Springs and Mount Isa. The more remote centres are served by the aerial services. Direct mails are despatched to several overseas countries but direct despatches are received only from London, Bangkok and Djakarta.

Trunk telephone links to Darwin extend from Townsville via a broadband microwave radio relay system and from Adelaide via carrier systems superimposed on the overland telegraph lines.

These systems also carry telegram and telex traffic and serve the towns along the routes. Subscriber trunk dialling facilities from Darwin and Nhulunbuy (Gove Peninsula), were made available during 1974.

High frequency radio telephone exchanges at Katherine and Alice Springs provide connections to the telephone network for some of the remote properties in the Northern Territory. The majority of homesteads on pastoral leases are equipped with radio transceivers operating through the Royal Flying Doctor base at Alice Springs or the Telecom Australia Outpost Radio base in Darwin, which provide a message passing and emergency communications service.

Regional national broadcasting stations are situated at Darwin, Alice Springs, Tennant Creek, Katherine and Gove and there are commercial broadcasting stations located at Darwin and Alice Springs. Two television stations ABD Channel 6 of the national broadcasting system and NTD Channel 8, a commercial station, operate in Darwin. The Darwin ABD 6 national program is also broadcast in Katherine (ABKN 7) and Tennant Creek (ABTD 9) with a translator (ABTD 9–10) to give coverage of the mining residential area at Warrigo. A national television station ABAD Channel 7 operates in Alice Springs.

EDUCATION

See also the chapter Education.

The Commonwealth Department of Education through its Northern Territory Division is responsible for the education administration in the Northern Territory.

This responsibility includes the following:

(i) Development of curricula for use in all Northern Territory schools; education research; in-service and pre-service education of teachers; development of a teaching resources centre.
(ii) Special projects covering the range of educational facilities in the Northern Territory, including education programs for Aborigines, migrant education and services for handicapped children.
(iii) Planning and controlling the capital works program of educational buildings in the Northern Territory.
(iv) Administration of capital assistance to non-government schools.

Much of this is carried out at a local level by staff of regional offices in Alice Springs, Tennant Creek and Katherine.

Schools in the Northern Territory

At August 1975 there were 98 schools in the Northern Territory catering for approximately 22,000 students.

About 3,000 of these students attend private or mission schools. The phase-out of South Australia's education commitments planned for the period 1971–75 is now completed, including the transfer of responsibility for recruiting and employing teachers to the Commonwealth Teaching Service. Staffing organisational patterns are unique to the Territory and are based on locally perceived needs. Professional staff are recruited by the Commonwealth Teaching Service as requested by the Northern Territory Authority.

The curricula of Northern Territory urban schools are basically derived from the South Australian pattern, but they are changing. For instance, the secondary schools are developing their own certification and matriculation assessment procedures, an exercise which is complicated by the fact that there is no university or college of advanced education in the Territory.

There are two Schools of the Air in the Northern Territory, one at Alice Springs and one at Katherine. Plans are under way at both centres to relocate the Schools in new buildings in late 1976 and to include in each a residential wing to allow students from remote areas to attend their home school for approximately one week each term. In 1974 the Schools assumed responsibility from the South Australian Correspondence School, for primary correspondence lessons for children living in isolated areas of the Northern Territory. Aerial patrols using a teacher pilot and regular road patrols in the dry season maintain teacher/pupil/parent contact.

A continuing development has been the interest in Indonesian and South-East Asian studies in secondary schools in the Northern Territory. Student and teacher exchange schemes now operate each year between Bali and Territory high schools.

New open-plan primary schools in urban areas have been opened recently, exciting local interest in fresh approaches to education. Current flexible-space designs reflect the desirability of alternative approaches to teaching techniques with a multi-cultural and heterogeneous student population. The area school concept in smaller urban communities is yielding to population growth and new primary and high school facilities are being provided.

Aboriginal education

The great majority of Northern Territory Aborigines live away from the town centres. Education for Aboriginal children is provided in various settings, including mission schools, Government schools on or near missions, Government schools in or near Aboriginal townships or in schools on pastoral properties.

In late 1973, as a result of a survey of educational buildings in Aboriginal communities (the Sebac Report) the Government initiated a major five-year program to upgrade buildings and facilities in these communities. However, a recent movement on the part of some Aboriginal family groups to leave central locations for a more traditionally oriented life style has posed new problems as regards providing educational facilities for these decentralised communities or 'out-stations' and a major project is under way to develop a new form of schooling compatible with the wishes of the communities. One means of providing physical facilities in this situation is the use of mobile 'caravan schools'.

The Government schools for Aboriginal children in out-of-town centres provide tuition at pre-school and primary school level, a number of them have some post-primary classes as well.

For Aboriginal children who wish to proceed to secondary school, there are three residential, transitional colleges. Yirara, Kormilda and Dhupuma Colleges are regionaly-based, but sited near urban centres. They provide students from bush locations with the opportunity to become bicultural, and prepare them for entry to secondary school programs in towns.

A development that has attracted wide interest and is likely to assume relatively large proportions is a bilingual education program whereby Aboriginal children are taught, in their early years of schooling, in their native tongue. Eleven languages have been analysed sufficiently to allow bilingual programs to be mounted, and initial literacy to be in local vernaculars. The extension of bilingual programs to the majority of Aboriginal children is hampered by the fact that there are over 130 languages and dialects in use.

The School of Australian Linguistics, which is training Aborigines as linguists, works closely with the Bilingual Education Section of the Northern Territory Division of the Commonwealth Department of Education.

Adult education is provided in Aboriginal townships and on missions. Most adult education activity takes the form of classes conducted by local instructors. Classes include song and dance, folklore, art and craft, English, civics, basic mathematics, hairdressing, mechanics, dressmaking, domestic science, health and nutrition, budgeting and manual arts. The Department of Education has developed a variety of short term courses to assist Aboriginal people to overcome problems of social concern, including elections and voting procedures. Intensive courses are conducted in major centres with visiting instructors, but Aborigines also conduct courses.

Darwin Community College

The Darwin Community College is presently the only institution which provides post-secondary education in the Northern Territory. The College was opened in 1974 and is an autonomous, multi-purpose institution. It has schools of business and management, general studies (including teacher education), creative and applied arts, technology and science, trades and linguistics. As well as courses leading to awards, the College provides a wide range of non-award general interest classes. It provides tutorial assistance to external students enrolled at the University of Queensland. The College has established a regional campus at Alice Springs and has annexes at Katherine, Nhulunbuy and Tennant Creek. The School of Australian Linguistics is established at Batchelor. During first semester 1976 the Darwin Community College recorded 5,437 course enrolments, the highest number in its brief history.

Though the Darwin Community College's role is primarily to cater for the Northern Territory's needs, it does have a national significance in that it is the first multi-level institution of its kind in Australia. Because of its unique educational nature it is constantly attracting visitors from interstate educational institutions and from overseas.

Apprenticeship training

Since March 1974 the formal training of apprentices in the Northern Territory has been co-ordinated through the Darwin Community College. Courses are conducted at the Casuarina and Alice Springs Campuses for the majority of trades. These courses are either day or block release. Trades that are less popular are serviced by interstate block courses.

Finance

Details of receipts and outlay of the Territory for the years 1970–1971 to 1974–75 are shown in the table following. In this table identifiable receipts and outlay of the Northern Territory have been classified into a National Accounts form. The table covers transactions relating to the Northern Territory in the Commonwealth Government Consolidated Revenue Fund and the following trust funds: Aborigines Benefits, Northern Territory Government Settlements Canteens, Northern Territory Housing Loans, Northern Territory Transport and Northern Territory expenditure from the Aboriginal Advancement Trust Account. Details of the financial transactions of the following Northern Territory semi-government authorities also included: the Northern Territory Port Authority and the Northern Territory Housing Commission. Details of the financial transactions of the Darwin City Council are also incorporated in the table. Revenue derived by the Commonwealth Government from income taxes, customs duties, etc., levied in the Northern Territory and expenditure by the Commonwealth Government in the Northern Territory on such items as defence, civil aviation, railways, etc., payments to residents from the National Welfare Fund and advances from the Aboriginal Loans Commission are not included.

NORTHERN TERRITORY: RECEIPTS AND OUTLAY
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Taxation—					
Rates on land	698	1,041	1,099	1,227	1,647
Vehicle registration fees	646	784	816	859	831
Liquor taxes(*a*)	366	443	486	589	568
Payroll tax	. .	1,587	1,957	2,684	5,117
Stamp duties	176	158	184	330	259
Other taxes, fees, fines, etc.	574	695	731	978	1,062
Interest, rent, etc.	1,598	1,488	1,542	2,085	1,838
Public enterprises income	3,505	3,928	3,753	4,683	−4,324
Net sale of local authority and public corporation securities	399	288	157	239	283
Other receipts(*b*)	1,773	6	975	928	−4,110
Net charge to Commonwealth budget	87,623	109,948	122,431	155,792	276,339
Total receipts	**97,358**	**120,366**	**134,131**	**170,394**	**279,510**
OUTLAY					
Final consumption expenditure—					
Law, order and public safety	3,326	3,607	5,440	7,410	12,539
Education	7,813	9,491	12,818	19,420	31,039
Health	9,417	12,069	14,673	19,882	27,890
Social security and welfare	8,028	8,478	10,570	11,462	20,227
Other	13,416	17,116	18,795	24,787	77,483
Expenditure on new fixed assets and stocks—					
Education	5,126	7,671	12,036	9,005	12,235
Health	2,089	9,457	5,274	8,991	14,569
Social security and welfare	455	348	623	220	500
Housing and community amenities	12,183	16,592	17,876	16,031	25,845
Roads	11,908	11,636	14,627	14,779	16,454
Other	6,107	7,879	7,345	6,367	16,232
Electricity, gas and water	10,083	8,960	8,032	9,191	11,692
Net purchase of existing assets	45	280	. .	3,729	9,069
Interest paid	154	226	238	252	239
Cash benefits	204	201	257	64	1,754
Subsidies	460	620	505	657	237
Net advances to the private sector—					
Housing and community amenities	4,608	3,749	1,163	8,252	−15,921
Other	−95	83	68	1	1,651
Net advances to public financial enterprises	. .	. .	. .	. .	2,750
Grants for private capital purposes	2,031	1,903	3,791	9,894	13,029
Total outlay	**97,358**	**120,366**	**134,131**	**170,394**	**279,510**

(*a*) Estimated for years prior to 1972–73. (*b*) Includes movements in cash, investments, etc.

THE AUSTRALIAN CAPITAL TERRITORY

General description

The Constitution provides that the Seat of Government of the Commonwealth of Australia shall be in the State of New South Wales but distant not less than 100 miles (160 kilometres) from Sydney. After a number of alternative sites were considered, an area of 2,359 square kilometres lying approximately 320 kilometres south-west of Sydney was transferred to the Commonwealth as from 1 January 1911. A further 73 square kilometres at Jervis Bay were transferred as from 4 September 1915 to serve as a port for the Territory.

The primary responsibility for administering the Australian Capital Territory lies with the Department of the Capital Territory, whose functions include housing, public transport, police and municipal services. Education, public health, justice, and the provision of basic physical services including water supply, sewerage and roads, are the responsibility of the Departments of Education, Health, Attorney-General's, and Construction. The National Capital Development Commission has the responsibility for the planning and development of the Canberra city area.

During 1974 the A.C.T. Advisory Council which had been in existence since 1930 was replaced by the A.C.T. Legislative Assembly. The first Assembly was elected on 28 September 1974 and held its first meeting on 28 October 1974.

The Assembly is constituted under the *Legislative Assembly Ordinance* 1936, Section 10 of which defines its role as follows:

'The Assembly may advise the Minister (for the Capital Territory) in relation to any matter affecting the Territory including the making of new Ordinances or the repeal or amendment of existing Ordinances.'.

Although the Assembly's present role is simply an advisory one the fact of its establishment has been seen by some as evidence of a move towards self-government for the Territory.

The Assembly consists of 18 Members (9 from each of the electoral divisions of Canberra and Fraser) and its procedure is modelled on that of the House of Representatives. Its Members serve on a part-time basis and sittings usually take place on two evenings each fortnight. During 1975 the Assembly held 24 sittings, comprising 33 sitting days.

The Assembly normally considers (and sometimes introduces) Ordinances which are proposed for the Territory and also passes resolutions on matters affecting the Territory. It is represented on a number of boards, authorities and committees, such as the Canberra Commerical Development Authority, the A.C.T. Electricity Authority, the Interim Schools Authority, the Capital Territory Health Commission, the Liquor Licensing Board and the Australian Constitutional Convention.

At the census of 30 June 1976 the population of the Australian Capital Territory was 197,578.

See also the chapters Population and Vital Statistics.

National Capital Development Commission

The *National Capital Development Commission Act* 1957 provides for a Commission to undertake and carry out the planning, development and construction of the City of Canberra as the National Capital of the Commonwealth. The year 1974–75 was the seventeenth year of the Commission's operations. Construction work was carried out by means of agency arrangements with the Department of Construction and private consultants. Expenditure by the Commission in recent years is as follows: 1971–72 $59.5 million; 1972–73 $74.4 million; 1973–74 $99.7 million. Total expenditure in 1974–75 was $147.5 million comprising: land development and services $33 million; water, sewerage and stormwater, services and headworks $18.2 million; housing, flats and other accommodation $23.2 million; educational facilities $16.3 million; roads, bridges and traffic control $8.6 million; city works and associated facilities $9.9 million; Commonwealth Government offices $21.4 million; national works $3.2 million; others $13.7 million.

The following major works were completed during the 1974–75 financial year by the Commission: land servicing projects in Charnwood, Macgregor, Flynn, Spence, Chapman, Garran, various medium density housing sites and streetlighting and underground electricity mains in various localities; reservoirs at Belconnen and Mount Stromlo; 54 inch trunk sewer Ginninderra Creek, Belconnen; 12 housing contracts in various localities; Primary schools at Flynn, Holder, Holt, Melba, Duffy, Weetangera; Waramanga/Weston Creek High school stage 1 and Melrose High school, Pearce assembly hall and library; stage 2 Tuggeranong Parkway; Tuggeranong arterial stage 1; Village Creek arterial stage 1; Weston Horticulture Centre; Phillip Transport Depot; Belconnen Town Centre—roads and hydraulic services; Campbell Park Offices stage 1—buildings 1 and 2; Russell Offices—building No. 10; Administrative Building—fire escape facility; Parliament House extensions.

Major works under construction at the commencement of the 1975–76 financial year; roads and services in Charnwood, Garran, Hawker, Spence, Stirling, Kaleen, Kambah, Fraser, Tuggeranong North, Wanniassa, Giralang; Googong Dam and associated works; bulk water supply main from Stromlo to Belconnen; South Taylor Reservoir No. 2 and associated supply mains; Weetangera Reservoir; Lower Molonglo Water Quality Control Centre; Tuggeranong Interceptor Sewer; Molonglo Valley Interceptor Sewer; Giralang trunk sewer; Village Creek trunk stormwater; Mount Taylor and Wanniassa catch drain and trunk drain; Tuggeranong Creek main drain and sewer; 31 major housing contracts; Canberra School of Music; Primary schools in Chapman, Charnwood, Evatt, Hawker, Kaleen, Kambah, 'Neighbour', 'Urambi' and 'Village Creek', Macgregor, Wanniassa 1; High schools in Holder (stage 1), Holt (Ginninderra High), Kambah, Melba, Wanniassa; Colleges in Hawker (Belconnen College), Phillip (Woden College), Stirling (Weston Creek College), Narrabundah—conversion from High School; Telopea Park library and canteen; Canberra Technical College—Reid: (i) School of Automotive Engineering, (ii) Food school, (iii) School of Graphic Arts, (iv) General Purpose Classrooms; Ginninderra Drive state 2, 3 and 4, Gundaroo Road North stage 1, Canberra Avenue duplication—Fyshwick to Queanbeyan, Lake Ginninderra—embankment and associated works, Drakeford Drive, Erindale Drive; Belconnen Police station and Interim Remand Centre; Phillip—Motor Vehicle Testing station; Belconnen Town Centre stormwater drainage; roads and services in Crace and Group Centres at Charnwood, Kippax and Weston; Lyneham—Showground grassed paceway; Phillip—Woden District Library; Kambah—Community Health Centre; Narrabundah—ninety-six bed Nursing Home; Phillip—Health and Welfare Centre; Tidbinbilla National Fitness Camp; Barton—Trade Group Offices; Belconnen Western offices stages 1, 2 and 3; Belconnen—Cameron offices; Campbell Park offices state 2; Canberra City—A.C.T. Health Services Building; Parkes—computer building; Parkes—The Treasury computer installation; Phillip—Fishburn House; Phillip—Woden East offices stage 1; Russell Building No. 12; Tuggeranong offices state 1; Parkes—Australian National Gallery and High Court building; Parkes—National Library, Lower Ground Floor 1.

Works and services

Housing

Until the period following the 1939–45 War most houses and flats in the Australian Capital Territory were built and rented by the then Department of the Interior. More recently, an increasing number of houses and flats have been built by private enterprise, and as a result the proportion of houses and flats in the Australian Capital Territory occupied by tenants of the Department of the Capital Territory (formerly the Department of the Interior) has fallen from 79.7 per cent of total occupied houses and flats in 1954 to 58.3 per cent in 1961, 38.8 per cent in 1966 and 28.1 per cent in 1971. Although the bulk of rented accommodation is provided by public authorities, and this situation will continue thus in the foreseeable future, there has been a considerable increase in the proportion of home ownership in the Australian Capital Territory since 1954. The proportion of houses and flats owned or being purchased by instalments has risen from 19.5 per cent in 1954 to 29.0 per cent in 1961, 45.6 per cent in 1966 and 51.8 per cent in 1971. Home building activity in the Woden Valley and Weston Creek, south-west of the former city area and Belconnen, north-west of the former city area, has continued to expand, and at June 1971 there were 11,280 occupied dwellings in the Woden Valley and Weston Creek area, and 5,145 occupied dwellings in the Belconnen area. *See also* the chapter Housing and Building.

Municipal services

Since its establishment, Canberra has been developed as a garden city. The development of new areas of parkland and the maintenance of existing tree and lawn areas is the responsibility of the City Parks Administration of the Department of the Capital Territory. During the six years ended 30 June 1975, some 2.2 million trees and shrubs have been propagated by the Department for 'planting out' in the city. The area of parks, gardens and sports grounds under maintenance at 30 June 1975 was about 5,100 hectares. Municipal services are also provided by the Department of the Capital Territory.

The water supply, sewerage and drainage systems in the Australian Capital Territory are under the control of the Department of Construction.

At 30 June 1975, 51,504 meters were connected to the city water supply, drawn through 31 reservoir installations, 3 of which comprises a pair of reservoirs, from 3 storages on the Cotter River with a total capacity of nearly 91,000 megalitres. In 1974–75, some 42,005 megalitres of water were consumed in Canberra serving a population of 185,000, and in addition the system supplied 2,656 megalitres to Queanbeyan, New South Wales, to an estimated population of 20,000. Treatment works at Weston Creek, Belconnen and Fyshwick dispose of Canberra's sewage. At 30 June 1975, 1,610 kilometres of sewers, 14 kilometres of rising sewerage mains, 1,717 kilometres of stormwater drains and a total length of 1,623 kilometres of water lines were laid.

Production

See also the chapters dealing with particular subjects.

Lands

Reference has been made in earlier issues of the Year Book to the general conditions of land tenure in the Territory and to the area of alienated and leased land, and the chapter Rural Industry of this issue contains statistical information on the subjects. (*See also* § 1. Canberra: Fifty Years of Development, page 123 of Year Book No. 49.)

Under the *Seat of Government* (*Administration*) *Act* 1910, no Crown lands in the Territory may be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of the Act. In general, leases of land in the city area are granted under the *City Area Leases Ordinance* 1936. In special circumstances land may be leased for purposes other than business or residential under the *Leases* (*Special Purposes*) *Ordinance* 1925 and for church purposes under the *Church Lands Leases Ordinance* 1924. As considerable areas of Government owned land in in the Territory are not immediately required in connection with the establishment of the City, they have been leased for agricultural or grazing purposes under the *Leases Ordinance* 1918 for terms consistent with the expected growth of Canberra. Some lands in the Territory, in areas generally remote from the City, remain in private ownership under freehold title. A program of progressive acquisition of this land is being implemented.

The Australian Territory at Jervis Bay, comprising about 73 square kilometres, was acquired from New South Wales for the possible provision of port facilities in connection with the Australian Capital Territory. A portion of the area is occupied by the Royal Australian Naval College (H.M.A.S. *Creswell*) and a Royal Australian Navy airfield. Several blocks fronting Sussex Inlet have been leased for guest houses and holiday camps, etc., under the *Leases Ordinance* 1918, and an area of land in the Murray's Beach area has been set aside for possible use as an atomic power station under the control of the Australian Atomic Energy Commission. Apart from picnic and camping areas, experimental planting, afforestation and soil conservation activities, the remainder of the area is being maintained in its natural state.

Forestry

Forestry field operations in the Australian Capital Territory began in 1915 with the planting of pines of the denuded slopes of Mount Stromlo to arrest soil erosion and improve visual quality of the landscape. In 1926 a program for development of commercial forests was approved following a comprehensive review of the Territory's potential for forest development. Major reviews of this program were made in 1932, 1954 and 1967, always however retaining the basic policy of systematic conservation and development. Much of the better native forest has been placed under management and forestry operations including fire protection treatment have been extended to some 44,500 hectares of natural forest in the Cotter Catchment and adjacent areas. The more productive stands in these areas were harvested extensively to provide timber for Canberra's post-war expansion and were subsequently treated to promote regeneration and protect the quality of water harvested.

The policy of forest management in the Australian Capital Territory has been formulated to cater not only for commercial timber production but also to provide recreation facilities and an attractive visual environment for the national capital and to protect the water supply. These policies can be broadly summarised as follows.

(*a*) Manage and develop plantations and hardwood forest area in the Australian Capital Territory and Jervis Bay for production of timber and arrange sales of all forest produce.
(*b*) Initiate and maintain a variety of growth and environmental experiments to produce information for management decisions.
(*c*) Develop and implement viable multiple use policies for forest areas with particular emphasis on recreation potential and facilities, quality of water harvest in catchments and conservation of the environment.

The forest authority is charged with the management of some 65,000 hectares of land in the Australian Capital Territory. Of this some 47,000 hectares carry native forest or woodland. As at 31 December 1974 the total area of coniferous plantations in the Australian Capital Territory and Jervis Bay was 14,400 hectares. Of 250 hectares at Jervis Bay the majority consists of *Pinus radiata* (Monterey Pine) and *Pinus elliottii* (Slash Pine). The plantations in the Australian Capital Territory consist mainly of *Pinus radiata* and *Pinus ponderosa* (Yellow Pine). Total area of *Pinus radiata* was 13,200 hectares.

In 1974–75 there was no significant commercial production of hardwood timber from the Australian Capital Territory and Jervis Bay. Currently hardwood logging is restricted to incidental production from silvicultural operations. However, the volume of softwood cut decreased to 120,344 cubic metres (130,744 cubic metres in 1973–74). The total value of this unprocessed timber unloaded at the mill (milldoor value) was $1,635,000. This returned $786,000 in royalties (value of unprocessed timber at stump).

Agricultural, pastoral and secondary industries

During 1973–74 the production of the more important items of the agricultural and pastoral industry was: wheat 355 tonnes; wool 539,000 kg; whole milk 2,841,000 litres; meat (carcass weight), fresh 7,674 tonnes. The numbers of livestock depastured at 31 March 1974 were: cattle 19,049; sheep 125,800; pigs 43.

As in the Northern Territory, the secondary industries established in the Australian Capital Territory are largely the service industries associated with the growth of the Territory.

The following table shows preliminary results of the Manufacturing Censuses taken in respect of the years ended 30 June 1974 and 1975.

AUSTRALIAN CAPITAL TERRITORY
MANUFACTURING ESTABLISHMENTS(*a*)

		1973–74	*1974–75*
Establishments operating during year	No.	139	104
Persons employed(*b*)	No.	3,704	3,678
Wages and salaries	$m	22.3	27.1
Turnover	$m	75.6	94.6
Opening stocks at 30 June	$m	5.5	8.9
Closing stocks at 30 June	$m	8.2	10.3
Purchases, transfers in and selected expenses	$m	36.8	46.7
Value added(*c*)	$m	41.6	49.2

(*a*) From 1974–75 all manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed. (*b*) Average over whole year. Includes working proprietors. (*c*) Sales, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Transport and communication

Canberra is connected with the railway system of New South Wales at Queanbeyan by a line 8 kilometres long. This line was opened for goods traffic on 25 May 1914 and for passenger traffic on 15 October 1923. Direct or linking services operate between Canberra and Sydney and Canberra and Melbourne. Two airlines provide many services daily each way on the Sydney-Canberra-Melbourne route. Regular motor-coach services link Canberra with towns in New South Wales, Victoria and South Australia. The total length of roads in the Territory at 30 June 1974 was: bitumen and concrete, 1,344 kilometres; gravel, 378 kilometres; other formed roads, 42 kilometres; total, 1,764 kilometres. There are four radio broadcasting stations in the Territory, 2CY and 2CN of the national broadcasting system and two commercial stations, 2CA and 2CC, and two television stations, ABC Channel 3 of the national broadcasting system and CTC Channel 7, a commercial station.

Social

See also the chapters Education; Public Health; and Law, Order and Public Safety.

Schools

The Education Ordinance 1937 provides for the compulsory attendance at school of children between the ages of six and fifteen years. At the beginning of 1974 the Commonwealth Department of Education assumed complete responsibility for the operation of Australian Capital Territory government schools taking over the areas of staff and curriculum previously carried out by the New South Wales Department of Education. The actual running of the schools is being controlled by an Interim A.C.T. Schools Authority, representative of teachers, parents and the community, with the Department retaining legal responsibility until the Authority attains permanent status. There were approximately 2,500 teachers in the Australian Capital Territory at February 1976, an increase of 200 over 1975.

The Interim A.C.T. Schools Authority has established the A.C.T. Schools Accrediting Agency which accredits courses and administers student assessment procedures for years 11 and 12. These procedures will replace the New South Wales Higher Schools Certificate examination from the end of 1976.

In February 1976 there were 15 government high schools in the Australian Capital Territory and 4 secondary colleges, which commenced operations in 1976. Secondary colleges will cater for years 11 and 12 and high schools for years 7 to 10. Secondary students enrolled numbered 12,796.

Sixty-two schools provide courses at infants and primary levels, 3 of these being in rural districts and 1 in the Jervis Bay area. The number of pupils enrolled in primary grades of government schools at February 1976 was 22,875.

Hartley Street School for physically handicapped children is located at Turner Primary School. It incorporates a pre-school section. Special units for deaf children are situated at Ainslie and Mawson Primary schools and Telopea Park High School.

Blind children attend Turner Primary School and partially sighted children enrol in the home school and are provided with special equipment by the Interim A.C.T. Schools Authority. Classes for mildly intellectually handicapped children are provided at Ainslie, Curtin South and Scullin Primary Schools, Lyneham High School and the Woden School. Three special schools, incorporating pre-school sections, serve the needs of moderately and some severe intellectually handicapped children. Nine primary schools cater for children of junior primary age who are unable to adjust to a normal class situation. One of these classes specialises in the care of children with severe language and communication disorders. Two reading centres operate, at Yarralumla and North Ainslie Primary Schools. Special English classes for migrant children are available at fifteen primary schools, four high schools and one secondary college. A number of physically and mildly intellectually handicapped and partial hearing children are being integrated into neighbourhood schools. Educational guidance services are provided by the Education Clinic and through counselling staff.

The 66 pre-schools including 2 in the Jervis Bay area and a mobile unit which visits outlying areas of the Australian Capital Territory provide pre-school facilities for approximately 5,000 children between the ages of 3 and 5 years. Provision is made at all pre-schools for the additional enrolment of children who have minimal problems, such as speech, behavioural and family problems. Five new primary and pre-schools were opened in 1975, at Charnwood, Chapman, Village Creek, 'Mount Neighbour', and 'Urambi', and at Giralang and Hawker in 1976. A pre-school at Wanniassa is scheduled to open in late 1976. Holder High School was opened in 1975, while Kambah and Melba High Schools opened in 1976.

At February 1976 there were 26 non-government schools in Canberra including 8 secondary schools. At the same date 7,176 pupils were enrolled in the primary grades of non-government schools and 5,539 pupils were enrolled in the secondary forms of non-government schools.

Other educational institutions

The Interim A.C.T. Technical and Further Education Authority was established in September 1975 to administer technical and further education in the A.C.T. The New South Wales Department of Technical and Further Education is however continuing to provide educational services for Canberra Technical College and the Canberra School of Art.

The Canberra Technical College provides trade, post-trade, certificate, and craft and leisure-type courses at the main campus and several annexes. At April 1976, 21 schools of study catered for 10,237 students in 172 courses.

The Canberra School of Art became a separate institution under the control of the Interim A.C.T. TAFE (Technical and Further Education) Authority in 1976. It offers diploma and certificate studies as well as non-vocational art and ceramic courses.

The Canberra School of Music is administered by the Commonwealth Department of Education and provides a four year full-time course and individual study in a range of instruments and voice. In March 1976 enrolments totalled 1,094. A new school to cater for between 1,000 and 1,200 students has been occupied in 1976.

The Canberra College of Advanced Education is administered by a Governing Council constituted under an Act of Parliament and offers courses in 6 schools—Administrative Studies, Applied Science, Liberal Studies, Teacher Education, Information Sciences and Environmental Design. Courses have a professional or vocational orientation and lead to undergraduate degrees, associate and graduate diplomas and a degree of Master of Education. An enrolment of 5,500 students is expected by the end of 1976.

The Australian National University consists of a School of General Studies and an Institute of Advanced Studies.

The School of General Studies is composed of Faculties of Arts, Asian Studies, Economics, Law and Science. It carries out both undergraduate and post-graduate training and research.

The Institute of Advanced Studies is a centre for research and training in research. It includes the John Curtin School of Medical Research and Research Schools of Physical Sciences, Social Sciences, Pacific Studies, Chemistry, Biological Sciences and Earth Sciences.

The University has established the following centres: Centre for Resource and Environmental Studies, Humanities Research Centre, North Australia Research Unit (based in Darwin), Survey Research Centre, Centre for Continuing Education, Computer Centre, Office for Research in Academic Methods, and the National Health and Medical Research Council Social Psychiatry Research Unit.

Continuing education

The Centre for Continuing Education, which is run by the Australian National University, is intended to foster the 'learning society' by enriching the contacts between the university and the community to their mutual advantage. The Centre offers a wide range of courses in the natural and social sciences and the humanities.

The Canberra Evening College is a continuing education service of the Interim A.C.T. Schools Authority and provides courses leading to the New South Wales Higher School Certificate and the Public Service Qualifying Examinations. The College also offers a variety of craft and cultural courses.

The Canberra Technical College offers courses in various forms of arts and crafts, including home crafts, shorthand and typing and several unit courses in Home Science.

Adult migrant education

Free part-time day and evening classes in English are being conducted in various primary and high schools throughout Canberra and Queanbeyan. The former Narrabundah Infants School is being used as the Migrant Education Centre for the 1976 and future programs. An innovation during 1975 was a special English class at the Woden Hospital Rehabilitation Centre for migrants who had been injured in industrial and other accidents.

Accelerated English tuition on a full-time basis of 300 hours over ten weeks is available to permanent residents and *bona fide* immigrants to Australia. Selection for these courses is made by the Department of Education on the basis of economic need.

Migrants can also apply to learn English by correspondence if this is more convenient. Home tutor kits are available from the Good Neighbour Council for individual tuition in private homes.

Apprenticeship training

At 30 June 1975, 1,840 apprentices were in training in the 72 declared apprenticeship trades in the Australian Capital Territory. Apprentices were employed by 775 approved employers of which 111 were new employers. During 1974–75 there were 1,052 new applications for apprenticeship. Seven hundred and twenty-eight new indentures were registered, representing an increase of 23.4 per cent in new indentures on 1973–74 totals. In this period 279 apprenticeships were completed and 212 cancelled. Trade courses at the Canberra Technical College are supplemented, where required, by remedial classes in Mathematics and English.

Health

Canberra Hospital and Woden Valley Hospital serve the population of Canberra and the surrounding region. At 30 June 1974, Canberra Hospital had 581 beds, a visiting medical staff of 196, a salaried medical staff of 68 and a nursing staff of 866. At 30 June 1974 Woden Valley Hospital had 304 beds, a salaried medical staff of 45 and a nursing staff of 362. The hospital will become fully operational in stages, eventually having 600 beds.

During 1974 another two community health centres opened in Canberra. A centre in Kambah serving the people of the Tuggeranong area was opened in August and another centre in the Canberra City area was opened in March.

The five community health centres operating in Canberra during 1974 offered primary care provided by health worker teams which may include doctors, nurses, social workers, psychologists, physiotherapists, infant welfare sisters, dentists and pharmacists.

Law, order and public safety

The Australian Capital Territory has a Supreme Court and a Court of Petty Sessions. The Territory is policed by the Australian Capital Territory Police Force which at 30 November 1975, had an authorised numerical strength of 570 officers and men of various ranks. The distribution is

Commissioner (1), Deputy Commissioner (1), Superintendent (5), Senior Inspector (1), Inspector First Class (3), Inspector Second Class (14), Sergeant First Class (17), Sergeant Second Class (20), Sergeant Third Class (53), Senior Constable (52), Constable First Class (80) and Constable (323). The Force is divided into two General Duties Divisions, a Criminal Investigation Division, a Management Services Division, a Recruitment and Training Division, a Traffic Division, a Legal Division and a Community Affairs and Press Liaison Division. These in turn are divided into a number of Sections and Squads including Scientific, Breath Analysis, Fraud, Licensing, Criminal and Traffic Adjudication, Water Police, Accident Investigation, Jervis Bay, Police Youth and Citizens' Club, Rural Patrol, Search and Rescue, Underwater Recovery, Armed Offenders and Anti-Hi-jacking, Drugs, Emergency Mobile Communications, Safety Education, Process Serving, Highway Patrol, Motor Cyclists, Driver Training, Amphometer, Motor Squad, Fingerprints, Information, Gazette and Operations Room. At present the Force operates from Police Stations at Civic Centre (Headquarters), Woden Town Centre and Jervis Bay with Water Police Headquarters at Yarralumla Bay. A Station will be established at Belconnen Town Centre in 1976.

Finance

In the following table identifiable receipts and outlay relating to the Australian Capital Territory have been classified in a National Accounts form. The table covers transactions of the Commonwealth Government in respect of the Australian Capital Territory in the Consolidated Revenue Fund and the following trust funds: Australian Capital Territory Forestry, Australian Capital Territory Housing, Australian Capital Territory Transport and Australian Capital Territory Suspense. In addition, details of the financial transactions of the following public corporations are also covered: Australian Capital Territory Electricity Authority, Commonwealth Brickworks, National Capital Development Commission, the Canberra Theatre Trust, and the Canberra College of Advanced Education. Revenue derived by the Commonwealth Government from income taxes, sales tax, etc. levied in the Australian Capital Territory and outlay on items of a national character such as defence, civil aviation, railways, etc., and payments to residents from the National Welfare Fund are not included.

AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND OUTLAY
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
RECEIPTS					
Taxation—					
Rates on land	1,383	4,362	5,166	6,134	7,135
Liquor	340	387	458	589	710
Vehicle registration fees	937	1,090	1,236	1,818	2,751
Payroll tax	..	1,974	3,136	4,922	10,318
Stamp duties	2,475	2,561	3,589	3,995	3,433
Other taxes, fees, fines, etc.	258	318	1,046	1,283	1,353
Interest, rent, etc.	7,208	7,689	11,904	13,728	13,463
Income from public enterprises	1,696	3,048	3,351	2,485	905
Net sale of public corporation securities	588	432	−38	−102	−214
Other receipts	2,342	2,219	653	1,018	643
Net charge to Commonwealth Government budget	84,430	91,577	97,630	166,576	261,909
Total receipts	**101,658**	**115,658**	**128,131**	**202,446**	**302,406**
OUTLAY					
Final consumption expenditure—					
Law, order and public safety	3,244	4,671	6,083	7,390	10,421
Education	13,352	15,828	22,022	32,026	49,021
Health, social security and welfare	6,514	7,743	9,453	15,948	23,853
Other	19,680	19,575	30,202	29,035	43,042
Expenditure on new fixed assets and stocks—					
Education	8,682	9,952	10,041	15,385	22,110
Health, social security and welfare	5,174	8,359	8,344	4,935	11,004
Housing	−1,058	−6,151	−8,392	−4,344	8,029
Community and regional development	13,016	16,946	19,312	25,668	36,726
Protection of the environment	1,064	2,545	4,889	8,198	17,301
Recreation and culture	1,955	1,169	1,768	3,630	4,850
Electricity, gas and water	3,647	3,945	3,415	5,718	5,648
Roads	7,894	5,511	7,775	9,432	10,264
Other	14,003	13,391	23,295	23,417	28,602
Net purchase of existing assets	−15,466	−15,500	−38,467	−4,935	−5,486
Interest paid	498	558	634	587	664
Cash benefits	62	60	64	24	19
Subsidies	26	28	38	67	120
Net advances for housing	18,435	26,053	26,601	29,076	29,591
Grants for private capital purposes	936	976	1,054	1,189	6,627
Total outlay	**101,658**	**115,658**	**128,131**	**202,446**	**302,406**

NORFOLK ISLAND

General description

Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 03′ S., longitude 167° 57′ E. approximately. Its total area is approximately 36 square kilometres, the island being about 8 kilometres long and 5 kilometres wide. It is 1,677 kilometres from Sydney and 1,069 kilometres from Auckland. The length of the coast line is 32 kilometres, and its form that of an irregular ellipse. Except for a portion on the south side and the landing place at Cascade on the northern side, almost inaccessible cliffs rise from the water's edge. The climate is equable, the average daily maximum temperature varying between 18°C and 26°C. The average annual rainfall is 1,372 millimetres. The resident population is about 1,900.

The island served as a penal station from 1788 to 1813 and from 1825 to 1855. In 1856, 194 descendants of the *Bounty* mutineers were transferred there from Pitcairn Island.

Administration

In 1856 the island was created a distinct and separate settlement under the jurisdiction of the Governor of New South Wales. In 1897 it was made a dependency under the Governor of that Colony, and finally, by the passage of the *Norfolk Island Act* 1913, became a Territory of Australia. It is controlled by the Minister for Administrative Services through an Administrator. The Norfolk Island Council was established pursuant to the *Norfolk Island Act* 1957 and is constituted in accordance with the provisions of the *Norfolk Island Council Ordinance* 1960. The Council may consider and tender advice to the Administrator on any matter affecting the peace, order and good government of Norfolk Island, and must be consulted on certain legislative and financial matters. The Council comprises the Administrator as *ex officio* chairman and voting member and eight members elected biennially.

Economic activity

The major economic activity of the island is tourism. Primary production is not fully adequate for local needs and foodstuffs are imported from New Zealand and Australia, mainly for the tourist trade.

Primary industries. The soil on the island is particularly fertile, the climate equable and the rainfall fairly evenly distributed except for a pronounced dry period in November. This enables a wide range of temperate and semi-tropical products to be cultivated. However, the island's comparative isolation presents trading difficulties, and there is only very limited production of export crops.

Fish abound off the island. In the past a number of ventures have been formed to exploit this resource, but they have been short-lived, mainly because of the lack of a sheltered harbour. A modern whaling station was started on the island in 1955, and production commenced during the second half of 1956. Owing to a marked scarcity of whales after 1961, however, the station was closed down

An active forestry program is being carried out to increase the resources of Norfolk Island pine and to introduce suitable types of eucalypts.

Tourists. Regular sea and air services to the island are available for those who seek a quiet holiday in surroundings of beauty and historic interest. There are at present, apart from flats and unlicensed guest houses, hotels and licensed guest houses, and further accommodation is being built to meet the steadily increasing number of visitors.

Employment. A large proportion of the population derives its income from various aspects of the tourist industry including the operation of hotels and duty-free stores. The Commonwealth Government provides services through staff from the Departments of Transport and Science (Bureau of Meteorology) and teachers are seconded by the N.S.W. State Education Department. A number of clerical and other positions are available to islanders in the Norfolk Island Administration. Very few people rely for their income entirely on agricultural pursuits.

Trade, transport and communication

Imports to Norfolk Island since the 1939–45 War have risen from $65,000 in 1945–46 to $6.2 million in 1974–75. The major proportion ($3 million) in 1974–75 came from Australia and the Pacific Islands while New Zealand supplied $0.7 million. Exports in 1974–75 amounted to $0.6 million. Exports to Australia and the Pacific Islands, the principal market, amounted to $0.4 million, while exports to New Zealand amounted to $140,000. No duties are chargeable on goods imported into Australia from Norfolk Island if the goods are produced or manufactured in Norfolk Island and shipped direct to Australia, and not goods which if manufactured or produced in Australia would be subject to excise duty.

Three shipping companies operate four services to Norfolk Island at approximately monthly intervals linking the Island with Australia, New Zealand and other islands in the South Pacific area.

A passenger and air freight service between Sydney and Norfolk Island is operated by Qantas Airways Ltd three times a week, and more frequently in peak periods. Air New Zealand Limited provides a service three times a week to the Island from Auckland.

There are approximately 80 kilometres of motor roads on the island. A substantial section of the population possesses private motor cars. Hire cars, taxis and scooters are available.

The island has an automatic telephone service and a radio telephone link with Sydney. A local broadcasting service is operated by the Administration.

Education

Education is free and compulsory between the ages of 6 and 15 years. The school, which is conducted for the Administration by the New South Wales Department of Education, conforms to the Australian standard of public education, ranging from kindergarten to the School Certificate (Fourth Form) examination. The number of scholars enrolled at 30 June 1975 was 308.

Some bursaries, subject to a means test, are available for pupils who wish to attend a mainland school either to continue their studies beyond the School Certificate level or undertake high school courses not available on the Island. A limited number of trainee scholarships are available for pupils who have left school and wish to undertake apprenticeship or similar training away from the Island.

Judiciary

The judicial system of Norfolk Island consists of a Supreme Court and a Court of Petty Sessions. The Supreme Court is the highest judicial authority in the Territory and is a superior court of record with original criminal and civil jurisdiction. The jurisdiction of this Court is exercised by one judge sitting in Court or, to the extent and in the cases provided by or under ordinance, sitting in Chambers. The jurisdiction of the Court of Petty Sessions is exercised by the Chief Magistrate or any three magistrates other than the Chief Magistrate.

Finance

Since Norfolk Island became a territory of the Commonwealth Government in 1913 the revenue of the territory has been supplemented by annual grants from the Commonwealth Government as internal revenue alone has not been sufficient to meet the cost of public works and services. The principal items of revenue and expenditure in recent years were as follows.

NORFOLK ISLAND: REVENUE AND EXPENDITURE
($'000)

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
REVENUE					
Government grant	66	66	120	120	126
Customs duty	146	158	180	319	410
Liquor profit	69	82	107	121	149
Company fees	51	89	164	145	198
Sale of stamps	234	226	107	175	348
Vehicle registration and licence fees	19	22	23	42	43
Government advance (repayable)	..	..	90	..	..
All other	86	106	83	115	134
Total revenue	**671**	**749**	**874**	**1,037**	**1,408**
EXPENDITURE					
Administration	166	183	204	233	240
Education services	99	44	126	165	146
Health and welfare services	64	79	91	85	98
Repairs and maintenance	136	176	132	149	211
Postal services	122	75	58	108	150
Capital works and services	142	154	197	63	128
Miscellaneous services	31	30	30	32	104
Total expenditure	**760**	**741**	**838**	**835**	**1,077**

HEARD ISLAND AND McDONALD ISLANDS

These islands, about 4,100 kilometres south-west of Fremantle, were transferred from the United Kingdom to Australia as from 26 December 1947. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard Island and McDonald Islands by the *Heard and McDonald Islands Act* 1953. In 1968, the responsibility for the administration of this Act was transferred from the Minister for External Affairs to the Minister for Supply, and in 1972 the responsibility was transferred to the Minister for Science.

In December 1947 an Australian scientific station was established on Heard Island, and meteorological investigations were conducted until the station was closed in March 1955 following the establishment of Mawson station on the Antarctic mainland. Australian expeditions have since visited the island from time to time. Heard Island is about 43 kilometres long and 20 kilometres wide. The McDonald Islands are 43 kilometres to the west of Heard Island. They are small, rocky and precipitous. The first known landing on McDonald Island, the largest of the group of the same name, took place on 27 January 1971 when two members of the Australian National Antarctic Research Expeditions (ANARE) paid a short visit on their way to the Heard Island station.

AUSTRALIAN ANTARCTIC TERRITORY

An Imperial Order in Council of 7 February 1933 placed under Australian authority all the islands and territories other than Terre Adèlie situated south of 60° S latitude and lying between 160° E longitude and 45° E longitude. The Order came into force with a Proclamation issued by the Governor-General on 24 August 1936 after the passage of the *Australian Antarctic Territory Acceptance Act* 1933. The boundaries of Terre Adélie were definitively fixed by a Franch Decree of 1 April 1938 as the islands and territories south of 60° S latitude lying between 136° E longitude and 142° E longitude. The *Australian Antarctic Territory Act* 1954 declared that the laws in force in the Australian Capital Territory, are so far as they are applicable and are not inconsistent with any ordinance made under the Act, in force in the Australian Antarctic Territory. In 1968, responsibility for the administration of this Act was transferred from the Minister for External Affairs to the Minister for Supply, and in 1972 the responsiblity was transferred to the Minister for Science.

On 13 February 1954 the Australian National Antarctic Research Expeditions (ANARE) established a station on MacRobertson Land at latitude 67° 36′ S and longitude 62° 53′ E. The station was named Mawson in honour of the late Sir Douglas Mawson and was the first permanent Australian station to be set up on the Antarctic continent. Meteorological and other scientific research is conducted at Mawson, which is a centre for coastal and inland survey expenditions.

A second Australian scientific research station was established on the coast of Princess Elizabeth Land on 13 January 1957 at latitude 68° 35′ S and longitude 77° 58′ E. The station was named in honour of the late Captain John King Davis, second-in-command of two of Mawson's expeditions and master of several famous Antarctic ships. The station was temporarily closed on 25 January 1965 and re-opened on 15 February 1969. On 4 February 1959 the Australian Government accepted from the United States Government custody of Wilkes station, which was established by the United States on 16 January 1957 on Vincennes Bay at latitude 66° 15′ S and longitude 110° 32′ E. The station was named in honour of Lieutenant Charles Wilkes who commanded the 1838–42 United States expedition to the area. The station was closed on 19 February 1969 when activities were transferred to Casey station built about 2 kilometres south of Wilkes. Casey station, which was opened on 19 February 1969, was named in honour of Baron Casey, former Governor-General of Australia, in recognition of this long association with Australia's Antarctic effort.

On 1 December 1959 Australia signed the Antarctic Treaty with Argentine, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the U.S.S.R., the United Kingdom, and the United States of America, Poland, Czechoslovakia, Denmark, the Netherlands and Romania have subsequently acceded to the Treaty. The Treaty reserves the Antarctic area south of 60° S latitude for peaceful purposes, provides for international co-operation in scientific investigation and research, and preserves, for the duration of the Treaty, the *status quo* with regard to territorial sovereignty, rights and claims. The Treaty entered into force on 23 June 1961. Since then the Antarctic Treaty powers have held several consultative meetings under the Treaty, the first at Canberra in July 1961.

COCOS (KEELING) ISLANDS

General description

The Cocos (Keeling) Islands, two separate atolls comprising some twenty-seven small coral islands with a total area of about 14 square kilometres, are situated in the Indian Ocean in latitude 12° 05′ S and longitude 96° 53′ E. They lie some 2,750 kilometres north-west of Perth and 3,700 kilometres almost due west of Darwin.

The main islands of the Territory are West Island, the largest, about 10 kilometres long, on which are the airport, the Administration and the community of mainland recruited employees; Home Island, where the headquarters of the Clunies-Ross Estate and Cocos Malay community are located; Direction Island; South Island; and Horsburgh Island, North Keeling Island, which forms part of the Territory, lies about 24 kilometres to the north of the group and has no inhabitants.

The main atoll is low-lying, flat, and thickly covered by coconut palms, and surrounds a lagoon which has an anchorage in the northern part but which is extremely difficult for navigation.

The climate is equable and pleasant, usually being under the influence of the south-east trade winds for about three-quarters of the year. However, the winds vary at times, and meteorological reports from the Territory are particularly valuable for those engaged in forecasting for the eastern Indian Ocean. The temperature varies between 21°C and 32°C, and the average yearly rainfall is about 2,513 mm. There are occasional violent storms. The estimated population at 30 June 1975 was 604.

History and administration

Summarised particulars of the discovery of the islands and their history up to 1946, when they became a dependency of the Colony of Singapore, are given in Year Book No. 51, page 140, and in earlier issues. On 23 November 1955 the Cocos Islands ceased to form part of the Colony of Singapore and were placed under the authority of Australia. The transfer was effected by an Order in Council made by Her Majesty Queen Elizabeth the Second under the Imperial Act entitled the Cocos Islands Act 1955 and by the *Cocos (Keeling) Islands Act* 1955 of the Commonwealth Parliament whereby the islands were declared to be accepted by Australia as a Territory to be known as the Territory of Cocos (Keeling) Islands.

Responsibility for the administration of the Territory rests with the Minister for Administrative Services. An Administrator was appointed to administer the Territory on behalf of Australia on 23 July 1975 under the *Cocos Administration Ordinance*. This Ordinance provides for an upgrading of the level of Government representation in the Territory. Until 23 July 1975, an official Representative, appointed by the Minister under the then *Official Representative Ordinance* 1955, exercised such powers and functions in relation to the Territory as were delegated to him by the Minister under the *Cocos (Keeling) Islands Act* 1955 or were otherwise conferred on him under that Act or under any other law of the Territory. The laws of the Colony of Singapore which were in force in the islands immediately before the date of the transfer were, with certain exceptions, continued in force by the *Cocos (Keeling) Islands Act* 1955. They may be amended or repealed by Ordinances made under the provisions of that Act which empower the Governor-General to make Ordinances for the peace, order and good government of the Territory.

Transport and communication

There is an airport at West Island of international standard, controlled by the Department of Administrative Services, under licence from the Department of Transport. There is a regular 3 weekly charter service routed Perth–Cocos (Keeling) Islands–Christmas Island–Perth. Under charter arrangements, a shipping service operates to the Territory at intervals of about six months. A radio teletype link with Perth is maintained by the Administration. There are local postal and telephone services, and a non-commercial broadcasting station.

CHRISTMAS ISLAND

Christmas Island is an isolated peak situated in the Indian Ocean in latitude 10° 25′ S, longitude 105° 40′ E. It is approximately 360 kilometres south from Java Head at the south entrance to Sunda Strait, 1,300 kilometres from Singapore and 2,600 kilometres from Perth. Christmas Island covers an area of about 140 square kilometres. It consists of a central plateau about 150 to 250 metres above sea level with several prominent rises up to 360 metres high. The plateau descends to the sea in a series of steep slopes alternating with terraces. Sea cliffs over 200 metres high run along a considerable portion of the coastline except in a few places, the chief of which is Flying Fish Cove, where the principal settlement is located and which is also the only anchorage.

The climate is pleasant, and the prevailing winds come from the south-east to east-south-east from May to December, but from then to April (the wet season) they occasionally shift round to between north and west. The average yearly rainfall is about 2,673 mm with a marked summer incidence. The porous nature of the ground prevents the formation of pools of water, but there are several good springs which maintain an adequate supply of fresh water for the small population and the installations. The mean average temperature is about 27°C, and does not vary greatly throughout the year.

The economy of the Territory is based entirely on the mining and extraction of phosphate, but prospects for its diversification are being explored.

At 30 June 1975 the estimated population was 3,032 (2,177 males and 855 females).

Education

From January 1975, the Government implemented in the Territory a series of new education arrangements which based the education system on an Australian curriculum. A summary of the previous arrangements are given in Year Book No. 60, page 1088, and in earlier issues.

Under the new arrangements, the Christmas Island Area School provides pre-school, primary and secondary education. The Christmas Island Technical Education Centre conducts trades and commercial courses, and also provides adult education classes and supervision of correspondence courses from the Western Australian Education Department's Technical Extension Service.

At 30 June 1975, 625 children were enrolled at the Area School and 521 students were enrolled at the Technical Education Centre.

At the end of 1975, the approved teaching staff establishments were 52 at the Area School and 6 at the Technical Education Centre.

History and administration

Summarised particulars of the history of Christmas Island up to its administration by the United Kingdom as a separate Crown Colony from 1 January 1958, pending transfer to Australia, are given in Year Book No. 51, page 141, and in earlier issues. On 1 October 1958 the island was transferred to Australia by the *Christmas Island Act* 1958 and an Official Representative was appointed to administer the Territory. In 1968 an Administrator was appointed, replacing the Official Representative and upgrading the level of Government representation. Responsibility for the administration and government of the Territory rests with the Minister for Administrative Services, and the Administrator manages day to day affairs in the Territory under delegation from the Minister. The laws which were in force on the island at 30 September 1958 were continued as the laws of the Territory after its transfer to Australia. They may be amended or repealed by Ordinances or by laws made under Ordinances of the Territory.

Phosphate deposits

The only commercial activity carried out is the mining of phosphate. The British Phosphate Commissioners act as managing agents for the Christmas Island Phosphate Commission. Phosphate is mined at several locations on the Island. During 1974–75, 1,411,002 tonnes of phosphate were exported to Australia and New Zealand. In addition 364 tonnes of phosphate dust were exported to South-East Asia and 1,804 tonnes went to Australia.

Transport and communication

Transport to and from the island is maintained by vessels operated under charter by the British Phosphate Commissioners as managing agents for the Christmas Island Phosphate Commission. One vessel makes regular trips between Christmas Island and Singapore–Malaysian ports, and other vessels carry phosphate to Australian ports and New Zealand.

A post office is staffed and operated by the Administration. The British Phosphate Commissioners operate an internal telephone system. A radio station is used for messages via Perth and Singapore and for communication with ships at sea. A limited power broadcasting station, VLU 2, also operates.

Regular air charter flights commenced in 1974. The charter operates every 3 weeks from Perth via the Cocos (Keeling) Islands. Charter flights also operate approximately every two weeks alternatively from Singapore and Kuala Lumpur.

CORAL SEA ISLANDS

The Coral Sea Islands were declared to be a Territory of Australia by the *Coral Sea Islands Act* 1969 which was slightly amended in 1973. The scattered reefs and islands, often little more than sandbanks, spread over a sea area of 1 million square kilometres with only a few square kilometres of actual land area, between the Great Barrier Reef, latitude 12°S and longitude 157° 10′ E. The Territory which is administered by the Minister for Administrative Services, has no permanent inhabitants. There is a manned weather station on Willis Island, some 500 kilometres east of Cairns and a number of unmanned facilities on various other islands in the Territory.

CHAPTER 31

MISCELLANEOUS

This chapter comprises statistics and other descriptive information not directly related to the subjects of the preceding chapters, or which it is convenient to assemble in single sections, arranged as follows: Value of Australian primary commodities produced; Indexes of agricultural production; Consumption of foodstuffs; Internal trade (retail and wholesale trade); Enterprise statistics; Industry concentration statistics; Interstate trade; Statistical organisation in Australia.

VALUE OF AUSTRALIAN PRIMARY COMMODITIES PRODUCED

The figures published in the following tables have been compiled by the Statisticians in the various States from the latest and best data available and are on a substantially uniform basis. However, marketing costs are not on a completely comparable basis between States and, in addition, accurate information is difficult to obtain for many items. In consequence, differences between States in the relationships of local to gross value should be treated with some reserve.

The classification categories *Pastoral*, *Dairying*, *Poultry* and *Bee-farming*, previously employed have been replaced by a more appropriate classification, *Livestock slaughtering and other disposals*, and *Livestock products*. Statistics relating to net value of production have been discontinued. For more detailed statistics on the value of crop production, livestock slaughtering and livestock products, refer to Chapter 22 Rural Industry.

Explanation of terms used

The following is a brief explanation of the terms used.

(*a*) *Gross value of production* is the value placed on recorded production at the wholesale price realised in the principal markets. In general, the 'principal markets' are the metropolitan markets in each State. (In cases where commodities are consumed locally, or where they become raw material for a secondary industry, these points are presumed to be the principal markets.)

(*b*) *Local value* (i.e. gross value of commodities produced at the place of production) is ascertained by deducting marketing costs from the gross value of commodities produced. Marketing costs include freight, cost of containers, commission, and other charges incurred in marketing.

Gross and local values of primary commodities produced involve some duplication, as they include certain primary commodities which are consumed as raw materials to produce other primary commodities (e.g. hay consumed by livestock). Values include any relevant subsidy and bounty payments.

Value of primary commodities produced, Australia

GROSS AND LOCAL VALUE OF PRIMARY COMMODITIES (EXCLUDING MINING): AUSTRALIA 1974-75

($'000)

Industry	*Gross production valued at principal markets*	*Local value—gross production valued at place of production*
Crops	3,193,393	2,843,948
Livestock slaughterings and other disposals(*a*)	1,019,213	910,177
Livestock products	1,655,124	1,505,364
Total agriculture	*5,867,730*	*5,259,489*
Forestry	212,639	195,445
Fishing	107,775	99,796
Hunting	13,762	12,323
Total forestry, fishing and hunting	*334,176*	*307,565*
Total primary (excluding mining)	**6,201,906**	**5,567,054**

(*a*) Includes adjustment for net exports (overseas and interstate) of live animals.

Gross value of primary commodities produced

GROSS VALUE OF PRIMARY COMMODITIES (EXCLUDING MINING) 1974-75

($'000)

Industry	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
Crops	822,280	533,868	868,191	434,707	483,573	49,476	960	338	3,193,393
Livestock slaughterings and other disposals(*a*)	337,539	241,425	193,273	102,786	102,497	31,707	9,722	264	1,019,213
Livestock products	492,793	506,829	163,790	169,943	258,388	58,588	1,020	3,773	1,655,124
Total agriculture	*1,652,612*	*1,282,122*	*1,225,254*	*707,436*	*844,458*	*139,771*	*11,702*	*4,375*	*5,867,730*
Forestry	51,216	48,781	25,163	16,311	19,995	50,021	11	1,142	212,639
Fishing	24,609	10,684	12,606	14,083	35,130	6,928	3,736	..	107,775
Hunting	4,016	6,086	700	868	1,663	428	..	..	13,762
Total forestry, fishing and hunting	*79,841*	*65,551*	*38,469*	*31,262*	*56,788*	*57,377*	*3,747*	*1,142*	*334,176*
Total primary (excluding mining)	1,732,453	1,347,673	1,263,723	738,698	901,246	197,148	15,449	5,517	6,201,906

(*a*) Includes adjustment for net exports (overseas and interstate) of live animals.

GROSS VALUE OF PRIMARY COMMODITIES (EXCLUDING MINING) AUSTRALIA
($'000)

Industry	*1970–71*	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Crops	1,477,425	1,585,084	1,569,723	2,846,095	3,193,393
Livestock slaughterings and other disposals(*a*)	1,009,928	1,134,383	1,542,166	1,695,956	1,019,213
Livestock products	1,078,998	1,237,122	1,834,035	1,859,020	1,655,124
Total agriculture	*3,566,351*	*3,956,592*	*4,945,926*	*6,401,071*	*5,867,730*
Forestry	137,168	151,177	170,574	193,344	212,639
Fishing	77,235	91,776	100,281	108,602	107,775
Hunting	10,152	10,185	12,051	12,451	13,762
Total forestry, fishing and hunting	*224,555*	*253,138*	*282,906*	*314,397*	*334,176*
Total primary (excluding mining)	**3,790,906**	**4,209,730**	**5,228,832**	**6,715,468**	**6,201,906**

(*a*) Includes adjustment for net exports (overseas and interstate) of live animals.

INDEXES OF AGRICULTURAL COMMODITIES PRODUCED

(In issues of the Year Book prior to No. 60, these indexes were referred to as 'indexes of farm production'. In issue No. 60., these indexes were referred to as 'indexes of agricultural production'). The two tables in this section present indexes of quantum of agricultural commodities produced, and unit value of agricultural commodities produced, by industrial groups.

Indexes of quantum of agricultural commodities produced

The quantum indexes of crops (excluding pastures), livestock slaughterings and other disposals and livestock products are indexes of the gross value of agricultural commodities produced at constant prices. The quantum index of agricultural output is an index of value of agricultural output at constant prices. The latter index relates to that part of agricultural commodities produced sold outside the agricultural sector and excludes the production of seed, feed and fodder consumed or retained on farms.

Indexes of the value of agricultural commodities produced and output at constant prices are measure of change in value after the direct affects of price changes have been eliminated. Measures of this type are, of necessity, subject to approximations and assumptions and they should not be interpreted in any precise quantitative sense.

In the main, the method used in compiling the quantum indexes has been to apply to current year quantities for individual farm commodities the corresponding average unit gross values for the weighting base period. Aggregates at constant prices (e.g. for livestock slaughterings) are then obtained by summation and converted to index numbers by dividing by the corresponding values in the reference base period. Indexes so derived may be described as fixed weights indexes, the weights of individual commodities in the aggregate measures being determined by their relative prices in the weighting base period. As prices do not all move in the same proportion or even in the same direction the choice of a particular weighting base period may affect the trend of the indexes.

In the original published series the period 1923–24 to 1927–28 was adopted as the base for revaluing each agricultural product. This series, using the fixed weights: average unit values for the period 1923–24 to 1927–28; re-computed to the reference base: average 1936–37 to 1938–39 = 100; was published in earlier issues of the Year Book (*see* No. 43, page 1051). For 1936–37 and later years the original series was replaced in December 1952 by a revised series in which the fixed weights of average unit values for the period 1936–37 to 1938–39 were used (with reference base: average 1936–37 to 1938–39 = 100). The regimen used for that revised series was extended and modified to include all agricultural commodities (as defined by Australian Statisticians). Certain other refinements were incorporated in those revised indexes, the principal of which was the omission of quantities of crops fed to livestock in Australia in calculating the "all farming" index.

This issue of the Year Book continues the revised series introduced in issue No. 60. The revised series was introduced in March 1974, for 1959–60 and later years, using the reference base: year 1968–69 = 100; and using as fixed weights: average unit values for the period 1968–69 to 1970–71.

INDEXES OF QUANTUM OF AGRICULTURAL COMMODITIES PRODUCED AND OUTPUT, AUSTRALIA(*a*)

BASE OF EACH INDEX: YEAR 1968–69 = 100

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Crops—					
Barley for grain	142.8	186.3	104.9	145.6	152.8
Oats for grain	94.3	74.6	43.0	64.7	51.1
Wheat for grain	53.2	58.0	44.3	80.4	76.6
Other grain cereals	241.0	219.5	192.0	209.1	187.1
Sugar cane(*b*)	94.4	103.6	101.2	102.9	108.8
Fruit and nuts	117.6	107.5	111.7	98.2	103.0
Grapevines	105.4	142.5	105.5	94.9	123.6
Vegetables	104.0	111.9	101.2	89.4	105.5
All other crops(*c*)	94.3	111.4	86.6	101.7	93.9
Total	*85.1*	*92.1*	*75.2*	*93.9*	*93.7*
Livestock slaughterings and other disposals—					
Cattle and calves(*d*)	111.7	124.4	153.3	139.4	163.3
Sheep and lambs	120.0	135.5	101.8	69.1	78.8
Pigs	112.0	119.9	145.6	130.1	108.0
Poultry	138.8	149.5	147.3	177.2	173.5
Total(e)	*115.2*	*127.9*	*142.1*	*127.4*	*142.1*
Livestock products—					
Wool	100.2	99.6	83.2	79.3	89.8
Milk	104.1	101.9	101.1	98.8	93.4
Eggs	116.7	113.7	110.5	105.0	106.7
Total(f)	*103.0*	*101.8*	*91.7*	*88.2*	*92.6*
Agricultural output(*g*)	**97.9**	**104.4**	**97.3**	**100.8**	**106.7**

(*a*) Indexes of value of constant prices (i.e. at average unit gross value of the 3 years ended 1970–71). (*b*) Sugar cane cut for crushing and planting. (*c*) Includes pastures and grasses. Excludes crops for green feed or silage. (*d*) Includes dairy cattle slaughtered. (*e*) Component series based on carcass weight. (*f*) Includes honey and beeswax. (*g*) Excludes seed, feed and fodder consumed or retained on farms.

Indexes of average unit gross value of agricultural commodities produced

(In issues of the Year Book prior to No. 60, these indexes were referred to as 'indexes of farm production'. In issue No. 60, these indexes were referred to as 'indexes of unit gross value of agricultural production').

The average unit value indexes of crops, livestock slaughterings and other disposals and livestock products shown in the following table measure changes in the average unit gross values of the included commodities. The average unit value index of agricultural output measures changes in average unit gross values of commodities sold outside the agricultural sector.

The average unit gross values used for each commodity in each year in the group indexes are obtained by dividing gross value of commodities produced by the quantity produced or marketed in that year. In the agricultural output index, the exclusion of production of seed and fodder crops retained within the farm sector may alter these average unit values slightly (as well as the weights) but otherwise the average unit values are the same.

The unit gross values are average amounts realised at 'principal markets' for the total quantities of relevant commodities produced or marketed in each year. In general, the 'principal markets' are metropolitan markets in each State. The average unit gross values relate to agricultural commodities produced or marketed in a particular year irrespective of the period in which payment is received by producers.

These indexes are not price indexes in the generally accepted sense because they measure not only the effects of price changes, but reflect also the effects of variations in the quality and composition of the commodities.

The indexes have been calculated by the fixed weights aggregative method. In the original published series of 'Production Price Index Numbers' the average quantities of the relevant commodities produced in the period 1923–24 to 1927–28 were used as fixed weights. This series, re-computed to the price base: average 1936–37 to 1938–39 = 100, was published in earlier issues of the Year Book (*see* No. 43, page 1050). For 1936–37 and later years the original series was replaced in December 1952 by a revised series in which average quantities of each product marketed during the period 1946–47 to 1950–51 were used as fixed weights (with price base: average 1936–37 to 1938–39 = 100). In that revised series the regimen was extended and modified to include all agricultural commodities (as defined by Australian Statisticians). Certain other refinements were also incorporated in those revised indexes, the principal of which was the omission from the weights used for the 'all farming' index of quantities of crops marketed for livestock feeding in Australia.

This issue of the Year Book continues the revised series introduced in issue No. 60. The revised series was introduced in March 1974, for 1959–60 and later years, using the reference base: year 1968–69 = 100, and using as fixed weights: average quantities of the relevant commodities produced or marketed in the three years ended 1970–71. The quantity weights for the agricultural output index have been adjusted to exclude seed, feed and fodder consumed or retained on farms.

The series 'Farm products for food use: indexes of quantum' as published in previous year books, has now been discontinued.

INDEXES OF AVERAGE UNIT GROSS VALUE OF AGRICULTURAL COMMODITIES PRODUCED AND OUTPUT AUSTRALIA(*a*)

Base of each Index: Year 1968–69 = 100.

	1970–71	*1971–72*	*1972–73*	*1973–74*	*1974–75*
Crops—					
Barley for grain	110.0	94.5	122.8	185.5	238.4
Oats for grain	97.9	85.3	124.7	175.6	198.5
Wheat for grain	103.9	109.1	108.6	223.6	225.4
Other grain cereals	87.7	86.2	124.1	170.2	170.2
Sugar cane(*b*)	117.8	128.3	145.8	136.1	288.2
Fruit and nuts	102.3	104.7	123.2	138.2	159.7
Grapevines	96.5	105.7	138.9	203.4	180.4
Vegetables	116.5	102.1	128.5	196.6	177.4
All other crops(*c*)	91.6	85.9	129.5	135.3	145.3
Total	*103.4*	*103.6*	*121.8*	*181.8*	*204.0*
Livestock slaughterings and other disposals—					
Cattle and calves(*d*)	102.7	102.8	119.1	136.7	57.1
Sheep and lambs	81.0	84.5	160.7	263.7	128.4
Pigs	107.9	106.8	97.8	153.1	189.6
Poultry	93.5	92.6	94.9	115.3	124.2
Total (*e*)	*97.9*	*98.6*	*123.9*	*163.1*	*89.9*
Livestock products—					
Wool	63.9	79.0	178.1	184.8	126.5
Milk	107.0	118.0	120.4	123.9	145.0
Eggs	85.6	87.6	95.4	126.5	144.6
Total(*f*)	*78.4*	*91.2*	*154.3*	*162.3*	*133.6*
Agricultural output(*g*)	**93.1**	**99.1**	**134.9**	**170.7**	**147.6**

(*a*) Component unit gross values are weighted together using average quantities for the three years ended 1970–71. (*b*) Sugar cane cut for crushing and planting. (*c*) Includes pastures and grasses. Excludes crops for green feed or silage. (*d*) Includes dairy cattle slaughtered. (*e*) Component series based on value per unit of carcass weight. (*f*) Includes honey and beeswax. (*g*) Excludes seed, feed and fodder consumed or retained on farms.

APPARENT CONSUMPTION OF FOODSTUFFS

Apparent consumption

The estimates of total consumption and consumption per head of population in Australia in the two tables which follow have been compiled by deducting net exports from the sum of production and imports and allowing for recorded movements in stocks of the respective commodities. The absence of particulars for stocks of certain commodities has resulted in some inaccuracies in the estimates of annual consumption. Consumption of foodstuffs is measured in general at 'producer' level. As a result, no allowance is made for wastage before the foodstuffs are consumed. In recent years wastage of foodstuffs has possibly been less than previously because of more efficient distribution and storage methods. Furthermore, it is likely that the quantities of foodstuffs shown in the following pages as available for consumption have been supplemented by production by householders for their own requirements. In most cases broad estimates of non-commercial (householders') production have been made. Except in few special cases, no adjustment has been made for changes in stocks held by wholesalers and retailers. Where no allowance is made it is considered unlikely that these stocks would make any appreciable difference to consumption estimates. It is felt that the foregoing deficiencies do not seriously impair the accuracy of the estimates compiled.

The estimates of consumption per head of population shown in the second of the following tables have been derived by dividing the total apparent consumption of each commodity or commodity group in a given year by the mean population of Australia in the same period.

More detailed information on the consumption of foodstuffs is contained in the statistical bulletin: *Apparent Consumption of Foodstuffs and Nutrients* (10.10), issued by this Bureau.

The following tables show the apparent average annual consumption during the three-year periods ended 1938–39, 1948–49 and 1958–59, together with the data for recent years.

APPARENT CONSUMPTION OF FOODSTUFFS: AUSTRALIA

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1972–73*	*1973–74*	*1974–75p*
Grain products—							
Flour (including wheatmeal for baking and sharps)	’000 tonnes	583.2	700.8	801.7	980.2	1,036.4	1,025.3
Rice, whole milled	,,	12.5	3.0	n.a.	29.0	27.4	32.2
Oatmeal and rolled oats	,,	15.6	13.8	13.5	9.4	8.7	n.a.
Other breakfast foods from grain	,,	17.5	32.7	46.4	80.1	80.9	88.6
Total grain products	,,	*639.8*	*759.4*	*n.a.*	*1,101.0*	*1,156.7*	*n.a.*
Sugar(*a*)	,,	331.8	415.4	492.9	664.4	666.0	660.9
Pulse and nuts—							
Dried pulse	,,	4.6	7.5	11.3	n.a.	n.a.	n.a.
Peanuts (in shell)	,,	4.3	13.1	10.9	24.0	20.7	24.5
Vegetables (fresh equivalent weight)—							
Potatoes—							
White	,,	323.6	431.1	503.4	635.9	571.2	707.7
Sweet	,,	7.5	5.4	6.2	7.9	8.0	8 1
Other root and bulb vegetables	,,	n.a.	146.0	155.3	219.8	233.3	240.7
Tomatoes	,,	48.8	87.7	126.4	224.6	201.3	137.6
Leafy and green vegetables	,,	n.a.	156.5	174.9	265.6	264.7	296.4
Other vegetables	,,	n.a.	165.4	181.3	198.4	199.5	209.9
Total vegetables	,,	*n.a.*	*992.1*	*1,147.3*	*1,552.2*	*1,478.0*	*1,600.4*
Fruit and fruit products—							
Citrus fruit	,,	99.4	129.2	156.2	399.7	421.7	503.3
Other fresh fruit	,,	292.8	302.3	346.9	474.3	452.4	447.8
Jams	,,	35.7	43.2	38.1	33.1	29.5	34.8
Dried fruit	,,	25.1	30.4	27.0	30.9	32.3	24.9
Canned fruit	,,	32.4	37.9	60.4	136.9	137.1	114.8
Total fruit (fresh equivalent)	,,	*540.8*	*617.7*	*702.5*	*1,197.5*	*1,205.3*	*1,249.2*
Meat (carcass weight)—							
Beef and veal	,,	437.2	378.7	547.0	511.9	540.4	868.0
Mutton	,,	187.1	156.5	225.2	193.1	109.0	115.4
Lamb	,,	46.7	87.5	129.7	244.2	210.4	242.9
Pigmeat	,,	26.6	24.7	44.3	102.8	90.3	70.1
Total carcass weight	,,	*697.6*	*647.3*	*946.2*	*1,052.1*	*950.1*	*1,296.4*
Canned meat (canned weight)	,,	6.6	9.1	18.2	33.7	32.4	30.2
Bacon and ham (cured carcass weight)	,,	32.0	40.5	31.0	71.8	72.9	67.3
Total processed meat (carcass equivalent weight)	,,	*58.5*	*70.6*	*74.3*	*142.4*	*140.0*	*129.3*
Poultry (dressed weight)	,,	n.a.	n.a.	n.a.	174.0	183.9	186.9
Eggs and egg products (eggs in shell weight)—							
In shell	,,	80.0	87.9	93.6	152.8	155.0	157.3
Pulp	,,	2.9	8.7	5.8	8.3	8.9	8.9
Powder	,,	..	..	0.2	0.9	1.1	1.2
Total eggs and egg products	,,	*82.9*	*96.6*	*99.6*	*162.1*	*165.0*	*167.4*
	mil doz	*193.3*	*162.3*	*167.3*	*237.6*	*242.0*	*245.4*
Fish—							
Fresh and frozen (edible weight)	’000 tonnes	18.4	17.9	23.2	41.5	50.4	38.4
Milk and milk products—							
Fluid whole milk	mil litres	731.9	1,059.2	1,254.7	1,607.4	1,591.8	1,522.0
Condensed, concentrated and evaporated milk	’000 tonnes	13.4	26.0	45.3	56.6	55.0	56.6
Powdered milk	,,	8.2	13.1	22.0	79.3	66.6	73.2
Infants and invalids foods	,,	3.0	4.4	9.6	18.3	20.1	29.3
Cheese	,,	13.6	19.1	25.4	60.6	63.2	69.6
Oils and fats—							
Butter	,,	103.0	86.1	120.3	109.0	104.2	98.5
Margarine—							
Table	,,	2.8	3.0	n.a.	21.6	23.3	30.3
Other	,,	12.4	19.0	21.5	53.4	54.6	52.5
Beverages—							
Tea	,,	21.4	22.5	26.5	27.0	26.1	26.5
Coffee(*b*)	,,	2.0	3.5	6.0	16.5	18.5	15.7
Beer	mil litres	364.0	588.6	1,004.6	1,719.8	1,874.3	1,921.9
Wine	,,	19.3	44.7	50.6	130.0	148.1	168.0
Spirits	mil litres alcohol	3.9	6.2	7.3	14.3	16.7	16.3

(*a*) In terms of refined sugar; includes sugar content of manufactured products consumed. (*b*) Coffee and coffee products in terms of processed whole or ground pure coffee.

APPARENT CONSUMPTION OF FOODSTUFFS PER HEAD OF POPULATION: AUSTRALIA

Commodity		*Average three years ended—*					
		1938–39	*1948–49*	*1958–59*	*1972–73*	*1973–74*	*1974–75p*
Grain products—							
Flour (including wheatmeal for baking and sharps)	kg	84.9	91.6	82.3	74.9	78.1	76.1
Rice, whole milled	,,	1.8	0.4	n.a.	2.2	2.1	2.4
Oatmeal and rolled oats	,,	2.3	1.8	1.4	0.7	0.7	n.a.
Other breakfast foods from grain	,,	2.5	4.3	4.8	6.1	6.1	6.6
Total grain products	,,	*93.1*	*99.2*	*n.a.*	*84.2*	*87.2*	*85.4*
Sugar(*a*)	,,	48.3	54.3	50.6	50.8	50.2	49.1
Pulse and nuts—							
Dried pulse	,,	0.7	1.0	1.2	n.a.	n.a.	n.a.
Peanuts	,,	0.6	1.7	1.1	1.8	1.6	1.8
Vegetables (fresh equivalent weight)—							
Potatoes—							
White	,,	47.1	56.3	51.7	48.6	43.1	52.5
Sweet	,,	1.1	0.7	0.6	0.6	0.6	0.6
Other root and bulb vegetables	,,	n.a.	19.1	15.9	16.7	17.6	17.9
Tomatoes	,,	7.1	11.5	13.0	17.2	15.2	10.2
Leafy and green vegetables	,,	n.a.	20.5	17.9	20.3	20.0	22.0
Other vegetables	,,	n.a.	21.6	18.6	15.1	15.0	15.6
Total vegetables	,,	*n.a.*	*129.7*	*117.7*	*118.5*	*111.5*	*118.8*
Fruit and fruit products—							
Citrus fruit	,,	14.5	16.9	16.1	30.6	31.8	37.4
Other fresh fruit	,,	42.6	39.5	35.6	36.3	34.1	33.2
Jams	,,	5.2	5.6	3.9	2.5	2.2	2.6
Dried fruit	,,	3.7	3.9	2.7	2.4	2.4	1.8
Canned fruit	,,	4.7	5.0	6.2	10.5	10.3	10.2
Total fruit (fresh fruit equivalent)	,,	*78.7*	*80.7*	*71.5*	*91.5*	*90.9*	*92.8*
Meat (carcass weight)—							
Beef and veal	,,	63.6	49.5	56.2	39.1	40.7	64.4
Mutton	,,	27.2	20.5	23.1	14.8	8.2	8.6
Lamb	,,	6.8	11.4	13.3	18.7	15.9	18.0
Pigmeat	,,	3.9	3.2	4.6	7.9	6.8	5.2
Total carcass weight	,,	*101.5*	*84.6*	*97.2*	*80.4*	*71.6*	*96.2*
Canned meat (canned weight)	,,	1.0	1.2	1.9	2.6	2.4	2.2
Bacon and ham (cured carcass weight)	,,	4.6	5.3	3.2	5.5	5.5	5.0
Total processed meat (carcass equivalent weight)	,,	*8.5*	*9.2*	*7.6*	*10.9*	*10.6*	*9.6*
Poultry (dressed weight)	,,	n.a.	n.a.	n.a.	13.3	13.9	13.9
Eggs and egg products (eggs in shell weight)—							
In shell	,,	11.7	11.5	9.6	11.7	11.7	11.7
Pulp	,,	0.4	1.1	0.6	0.6	0.7	0.7
Powder	,,	. .	. .	. .	0.1	0.1	0.1
Total eggs and egg products	,,	*12.1*	*12.7*	*10.2*	*12.4*	*12.4*	*12.4*
	No.	*243*	*255*	*206*	*218*	*219*	*219*
Fish—							
Fresh and frozen (edible weight)	kg	2.7	2.4	2.4	3.2	3.8	2.8
Milk and milk products—							
Fluid whole milk	litres	106.4	138.7	128.7	122.8	120.0	108.9
Condensed, concentrated and evaporated milk	kg	2.0	3.4	4.7	4.3	4.1	4.2
Powdered milk	,,	1.2	1.7	2.3	6.1	5.0	5.4
Infants and invalids foods	,,	0.5	0.6	1.0	1.4	1.5	2.2
Cheese	,,	2.0	2.5	2.6	4.6	4.8	5.2
Oils and fats—							
Butter	,,	14.9	11.2	12.3	8.3	7.9	7.3
Margarine—							
Table	,,	0.4	0.4	n.a.	1.6	1.8	2.2
Other	,,	1.8	2.4	2.2	4.1	4.1	3.9
Beverages—							
Tea	,,	3.1	2.9	2.7	2.1	2.0	2.0
Coffee(*b*)	,,	0.3	0.5	0.6	1.3	1.4	1.2
Beer	litres	53.2	76.8	103.2	130.5	141.3	142.7
Wine	,,	2.7	5.9	5.0	9.9	11.2	12.5
Spirits	litres alcohol	0.5	0.8	0.8	1.3	1.3	1.2

(*a*) In terms of refined sugar; includes sugar content of manufactured products consumed. (*b*) Coffee and coffee products in terms of processed whole or ground pure coffee.

Level of nutrient intake

The next table shows details of the estimated supplies of nutrients available for consumption in Australia during recent years in comparison with the annual averages for the three-year periods ended 1938–39, 1948–49 and 1958–59. The table has been compiled by the Nutrition Section of the Commonwealth Department of Health and is based on the estimates of the quantity of foodstuffs available for consumption per head of population shown in the preceding table.

ESTIMATED SUPPLY OF NUTRIENTS AVAILABLE FOR CONSUMPTION: AUSTRALIA

(Per head per day)

	Average three years ended—					
Nutrient	*1938–39*	*1948–49*	*1958–59*	*1971–72(a)*	*1972–73(a)*	*1973–74(a)*
Protein—						
Animal g	58.7	57.4	59.6	68.3	65.3	60.5
Vegetable ,,	30.9	35.3	32.3	32.7	32.8	33.0
Total ,,	89.6	92.7	91.9	101.0	98.1	93.5
Fat (from all sources) ,,	133.5	121.7	131.7	121.6	115.1	113.0
Carbohydrate ,,	377.4	424.8	416.7	409.6	402.0	423.4
Calcium mg	642.0	785.0	817.0	1,008.0	1,003.0	962.7
Iron ,,	15.4	15.1	14.0	14.6	14.0	13.4
Vitamin A (Retinol Activity) i.u.	4,905	4,630	4,568	(*b*)1,644	(*b*)1,563	(*b*)1,206
Vitamin C (Ascorbic acid) mg	86.0	96.0	89.0	98.0	97.0	89.4
Thiamin ,,	1.4	1.5	1.3	1.6	1.6	1.6
Riboflavin ,,	1.7	1.9	1.8	2.8	2.8	2.9
Niacin ,,	18.7	17.6	18.6	20.6	19.6	19.0
Energy value kilocalories	3,117	3,245	3,297	3,295	3,176	3,223

(*a*) Not comparable with years prior to 1968–69. Figures are based on conversion factors calculated from the revised and enlarged edition of 'Tables of Composition of Australian Foods'. (*b*) Micrograms.

NOTE. One international unit (i.u.) of vitamin A is equivalent to 0.3 micrograms of retinol.

INTERNAL TRADE

Extensive statistics of retail trade have been collected and published over many years. The first full census of wholesale trade, however, was conducted as part of the integrated economic censuses of 1968–69, outlined briefly below. For a detailed description of these censuses, reference should be made to Year Book No. 56, 1970, Chapter 31.

Economic Censuses, 1968–69

For the year ended 30 June 1969 the censuses of Wholesale Trade, and of Retail Trade and Selected Services, were conducted for the first time on an integrated basis with censuses of Mining, Manufacturing, and Electricity and Gas Production and Distribution. The integration of these economic censuses was designed to increase substantially the usefulness and comparability of the kinds of statistics already being collected and published by the Bureau and to form a basis for the sample surveys which supply current economic statistics from quarter to quarter, particularly those which provide data for the quarterly national income and expenditure estimates.

The integration of these economic censuses meant that for the first time they were being collected on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result, the statistics for the industries covered by the censuses are now provided with no overlapping or gaps in scope, and in such a way that aggregates for certain important economic data such as value added, employment, salaries and wages. fixed capital expenditure and stocks can be obtained on a consistent basis for all sectors of the economy covered by the censuses.

The standardisation of census units in the integration of economic censuses means that the basic census unit (the establishment) in general now covers all the operations carried on under the one ownership at a single physical location. The retail establishment is thus one predominantly engaged in retailing, and the wholesale establishment one predominantly engaged in wholesaling, but the data supplied for them now cover, with a few exceptions, all activities at the location.

Establishment statistics, other than the number of establishments, also include data relating to separately located administrative offices and ancillary units serving the establishment and forming part of the business (enterprise) which owns and operates the establishment. These units, such as head offices, storage premises, transport depots and motor vehicle repair and maintainance workshops, were formerly excluded from censuses.

The summary tables shown in this section include final figures from the 1968–69 censuses of wholesale and retail trade. Further and more detailed statistics are included in separate bulletins published by the Central and State offices of this Bureau.

Wholesale Trade

The term wholesale trade is used in the wholesale census in the broad sense to include the resale (by agents or principals) of new or used goods to retailers or other wholesalers or to institutional (including government), professional or other business users (including farmers and builders). The more important types of business engaged in wholesale trade are wholesale merchants, who take title to the goods they sell; manufacturers' sales branches; commission agents, including import and export agents and purchasing agents; petroleum products distributors; and co-operative and marketing boards engaged in marketing farm products.

Each establishment in the integrated censuses is identified in terms of a particular location and all sales, employment, etc., are recorded for that location, regardless of the size of the sales territory covered, i.e. the location of customers. For this reason, all of the sales, etc., of the wholesale establishments located in the State of Victoria, for example, are credited to Victoria even though the sales territories may extend over several States.

In the tables which follow, wholesale establishments have been classified by type of operation according to the nature of the functions performed and by industry according to the Australian Standard Industrial Classification. The basis of the broad type of operation classification is the description of 'type of operation' reported by businesses for each individual wholesale establishment.

WHOLESALE ESTABLISHMENTS: SUMMARY OF OPERATIONS BY BROAD TYPE OF OPERATION: AUSTRALIA, 1968-69

Broad type of operation	*Number of establishments at 30 June 1969*	*Persons employed (a)*	*Wages and salaries*	*Turnover*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses*	*Value added (b)*	*Total wholesale sales*
					1968	*1969*			
	No.	No.	$m	$m	$m	$m	$m	$m	$m
Primary produce dealers or agents	3,468	37,603	102.5	1,846.0	304.0	523.5	1,827.5	238.0	4,025.4
Wholesale merchants—									
Import and/or export merchants	3,171	35,515	111.5	2,197.1	300.2	346.0	1,926.9	316.0	2,411.5
Other wholesale merchants	18,489	210,300	590.8	8,198.0	1,015.6	1,103.0	6,880.7	1,404.8	8,263.2
Manufacturers sales branches holding stocks	1,751	31,464	101.4	1,550.1	163.8	187.2	1,273.4	300.1	1,947.6
Commission agents or brokers	3,426	16,847	47.0	361.9	33.3	36.5	248.2	116.8	2,514.6
Petroleum distributors	2,387	22,186	77.4	1,660.8	124.6	141.9	1,339.1	339.0	2,811.3
Repairers and lessors of machinery and equipment	664	4,896	14.7	85.3	4.1	5.3	28.1	58.4	27.5
Total wholesale trade	**33,356**	**358,811**	**1,045.3**	**15,899.1**	**1,945.5**	**2,343.4**	**13,524.0**	**2,773.0**	**22,001.1**

For footnotes *see* next page

WHOLESALE ESTABLISHMENTS: 1968-69

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Establishments at 30 June	11,882	9,189	4,912	3,159	2,950	920	113	231	33,356
Persons employed(*a*)	130,387	102,021	50,521	32,462	32,192	8,775	879	1,574	358,811
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Wages and salaries	399.5	307.1	135.0	87.0	85.6	23.6	2.8	4.8	1,045.3
Turnover	5,749.8	5,120.7	2,130.3	1,226.9	1,271.8	308.6	35.7	55.4	15,899.1
Stocks at 30 June—									
1968	644.8	759.1	214.4	135.8	143.1	39.1	4.3	4.9	1,945.5
1969	718.2	1,035.1	230.0	144.9	162.4	42.4	4.9	5.6	2,343.4
Purchases, transfers in and selected expenses	4,769.4	4,571.3	1,795.5	1,006.7	1,057.7	250.7	28.5	43.9	13,524.0
Value added(*b*)	1,053.7	825.4	350.4	229.3	233.3	61.2	7.8	12.2	2,773.0
Total wholesale sales	8,054.8	6,910.6	2,910.4	1,699.5	1,866.6	435.8	58.1	65.2	22,001.1

(*a*) At end of June 1969, includes working proprietors. (*b*) Sales on own account, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

WHOLESALE ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY CLASS AUSTRALIA, 1968-69

Industry class	*Number of establishments at 30 June 1969*	*Persons employed (a)*	*Wages and salaries*	*Turnover*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses*	*Value added (b)*	*Total wholesale sales*
					1968	*1969*			
	No.	No.	$'000	$'000	$'000	$'000	$'000	$'000	$'000
General wholesalers	428	9,318	26,451	346,692	43,949	46,303	297,513	51,533	593,244
Wool selling brokers, stock and station agents and farm suppliers	2,978	29,277	82,486	659,482	58,068	61,256	482,715	179,955	2,680,860
Wool buyers and farm products wholesalers, n.e.c.	993	8,401	25,974	1,437,107	258,629	495,660	1,602,808	71,329	2,039,371
Petroleum and petroleum products wholesalers	2,456	22,558	75,205	1,669,760	124,984	142,328	1,345,204	341,900	2,821,141
Iron and steel wholesalers	336	5,610	19,222	379,367	60,472	72,483	337,384	53,995	485,963
Metal scrap wholesalers	325	2,261	5,664	89,073	4,856	5,109	73,966	15,360	89,918
Metals and minerals wholesalers n.e.c.	197	2,332	8,252	350,772	19,939	24,150	326,768	28,215	453,879
Chemical and allied products wholesalers n.e.c.	497	5,814	21,218	381,488	60,942	70,159	318,610	72,095	433,101
Total, Other minerals metals and chemical wholesalers	*1,355*	*16,017*	*54,358*	*1,200,701*	*146,209*	*171,899*	*1,056,727*	*169,664*	*1,462,864*
Agricultural and construction machinery dealers	2,282	22,048	61,758	807,384	176,304	193,634	656,921	167,792	777,033
Tyres and motor vehicle parts wholesalers	1,050	19,235	54,158	598,989	111,524	123,892	467,330	144,029	620,933
Professional and scientific equipment wholesalers	311	3,524	10,753	85,764	19,367	21,849	64,473	23,773	89,914
Dealers in business machines, including computers	584	12,025	41,965	191,498	40,395	39,408	87,479	103,033	134,311
Electrical and electronic equipment wholesalers n.e.c.	1,061	13,049	40,536	484,688	71,366	82,332	397,121	98,533	571,529
Industrial machinery and equipment wholesalers n.e.c.	1,769	20,980	69,949	723,453	142,572	156,608	578,722	158,767	808,276
Total, Machinery and equipment wholesalers	*7,057*	*90,861*	*279,124*	*2,891,775*	*561,525*	*617,722*	*2,252,045*	*695,927*	*3,001,995*
Timber wholesalers	862	9,185	26,523	370,618	41,391	44,979	315,674	58,527	399,573
Dealers in builders' hardware and materials n.e.c.	4,057	40,844	110,182	1,073,353	136,649	146,296	855,299	227,703	1,226,008
Total, Building materials and suppliers wholesalers	*4,919*	*50,029*	*136,707*	*1,443,969*	*178,040*	*191,275*	*1,170,972*	*286,233*	*1,625,581*
Household appliances, radio and TV wholesalers	549	9,052	26,919	400,153	40,910	49,033	331,587	76,688	465,411
China, glassware and domestic hardware wholesalers	529	3,527	9,121	98,269	15,665	16,592	75,643	23,553	140,480
Furniture and floor coverings wholesalers	530	3,064	8,176	121,903	16,232	18,172	100,891	22,951	214,054
Total, Wholesalers of household appliances and hardware, furniture	*1,608*	*15,643*	*44,216*	*620,325*	*72,807*	*83,797*	*508,122*	*123,192*	*819,946*

For footnotes *see* next page.

WHOLESALE ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY CLASS
AUSTRALIA, 1968–69—*continued*

Industry class	*Number of establishments at 30 June 1969*	*Persons employed (a)*	*Wages and salaries*	*Turnover*	*Stocks at 30 June*		*Purchases, transfers in and selected expenses*	*Value added (b)*	*Total wholesale sales*
					1968	*1969*			
	No.	No.	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Men's and boys' clothing wholesalers	502	3,789	10,003	177,910	23,810	24,488	150,198	28,390	261.030
Women's, girls' and infants' clothing wholesalers	913	5,910	14,982	220,541	23,550	23,668	181,235	39,423	361,626
Footwear wholesalers	234	1,512	4,260	73,665	3,880	4,142	60,412	13,515	139,475
Textile and textile products wholesalers n.e.c.	1,252	9,562	27,147	428,166	61,938	66,596	363,807	69,017	712,751
Total, Clothing, footware and textile wholesaiers n.e.c.	*2,901*	*20,773*	*56,393*	*900,282*	*113,178*	*118,894*	*755,652*	*150,345*	*1,474,881*
Meat wholesalers	451	4,950	15,330	494,779	12,032	16,105	451,318	47,535	545,623
Poultry, smallgoods and dairy products wholesalers	652	6,786	20,083	525,086	47,398	37,406	456,858	58,236	648,882
Fruit and vegetables wholesalers	1,050	9,148	21,831	273,669	6,715	6,026	226,529	46,450	373,504
Fish wholesalers	274	3,326	7,580	140,803	9,238	11,581	121,812	21,333	156,832
Eggs wholesalers	92	2,270	5,553	111,079	4,026	3,709	100,300	10,462	102,905
Confectionery and soft drinks wholesalers	477	3,539	8,807	145,424	8,034	9,740	125,934	21,195	169,541
Beer, wine and spirits wholesalers	289	4,863	14,451	265,940	26,357	29,893	219,664	49,813	271,221
Cigarettes, cigars and tobacco wholesalers	195	3,633	11,607	435,770	19,713	20,865	405,044	31,877	513,443
Groceries and food wholesalers n.e.c.	1,199	18,011	49,167	1,088,429	88,969	90,963	962,388	128,038	1,212,356
Total, Food, beverages and tobacco products wholesalers	*4,679*	*56,526*	*154,411*	*3,480,978*	*222,481*	*226,289*	*3,069,847*	*414,940*	*3,994,318*
Photographic equipment and supplies wholesalers	149	2,435	7,156	81,004	9,992	12,760	58,592	25,179	83,659
Watches, clocks and jewellery wholesalers	419	2,160	5,090	61,399	15,479	16,742	47,657	15,006	69,963
Toys and sporting goods wholesalers	417	2,939	7,401	88,257	16,585	18,148	70,177	19,643	98,699
Books, periodicals, paper and paper products wholesalers	1,021	12,132	34,296	410,459	55,342	67,095	334,286	87,926	500,494
Pharmaceutical and toilet preparations wholesalers	854	12,661	35,393	426,484	49,091	51,464	332,047	96,809	526,371
Wholesalers n.e.c.	1,122	7,081	17,651	180,459	19,173	21,803	139,663	43,425	207,677
Total, Other wholesalers	*3,982*	*39,408*	*106,988*	*1,248,063*	*165,662*	*188,011*	*982,424*	*287,987*	*1,486,859*
Total, Australia	33,356	358,811	1,042,311	15,899,132	1,945,537	2,343,435	13,524,025	2,773,008	22,001,060

(*a*) At end of June 1969; includes working proprietors. (*b*) Sales on own account, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Retail Trade

The definition of 'retail trade' adopted in the 1973–74 Retail Census is the same as the definition used in previous retail censuses, i.e. the resale of new and used goods to final consumers for personal and household consumption. The bases on which previous censuses of retail establishments were conducted were described in detail in Year Book No. 56, 1970 (page 1022).

The 1973–74 Retail Census differed from previous censuses both in scope and data content. It was conducted primarily to provide data to enable a new sample of retail establishments to be selected for the Quarterly and Monthly Surveys of Retail Establishments. These surveys are conducted throughout Australia, and are the means by which estimates of the value of retail sales are obtained in the period between censuses. The surveys cover all States but do not include establishments in the Australian Capital Territory or the Northern Territory.

Bread and milk vendors, footwear repairers, motion picture theatres and laundries and dry cleaners which were included in the scope of the previous census taken in 1968–69 were excluded from the scope of the 1973–74 Retail Census. Similarly questions relating to purchases, stocks, capital expenditure, etc. which were included on the 1968–69 census forms were not included on the 1973–74 census forms.

Censuses of Retail Trade in Australia have traditionally included certain types of service establishments in their scope, in addition to retail establishments more narrowly defined. Some of the service establishments included make retail sales in appreciable volume as well as providing important services for which the statistics can be conveniently collected in the framework of the retail census.

The following service establishments were included in the 1973–74 Retail Census: cafes and restaurants (ASIC class 9211), licensed hotels, motels and wine saloons (ASIC class 9212), licensed clubs (ASIC classes 9221-9223), and hairdressers (ASIC classes 9321-9322).

Because of the changes which have occurred in the definition of census units, the scope of the census and the items of data collected, it is not possible to make direct comparisons between the figures obtained from the 1973–74 Retail Census and those obtained from previous retail censuses or from the monthly and quarterly retail surveys based on previous retail censuses. For further information concerning such changes and their effects on comparisons with other statistics of retail trade, reference should be made to Year Book No. 56, 1970 Chapter 31, and to *Census of Retail Establishments and Selected Service Establishments* 1973–74—*Final Bulletins.*

RETAIL ESTABLISHMENTS AND SELECTED SERVICE ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY CLASS, AUSTRALIA, 1973–74

Industry Class	*Number of establishments at 30 June 1974*	*Employment at end of June 1974(a)*			*Wages and Salaries (b)*	*Retail Sales*	*Wholesale Sales*	*Other operating revenue*	*Turnover*
		Males	*Females*	*Persons*					
RETAIL ESTABLISHMENTS									
	No.	No.	No.	No.	$m	$m	$m	$m	$m
Department stores	296	28,914	61,097	90,011	315.5	1,870.3	56.6	36.5	1,963.4
Variety and general stores	1,376	7,807	24,485	32,292	91.7	529.5	28.4	15.6	573.5
Total, Department variety and general stores	*1,672*	*36,721*	*85,582*	*122,303*	*407.2*	*2,399.8*	*85.0*	*52.1*	*2,536.9*
Supermarkets	915	21,163	31,919	53,082	136.7	1,563.6	5.1	1.3	1,570.1
Grocers and tobacconists	19,473	25,030	41,030	66,060	89.4	1,624.5	7.4	10.6	1,642.5
Butchers	8,460	23,600	5,915	29,515	93.8	831.2	5.3	0.1	836.6
Fruit and vegetable stores	4,368	6,609	8,459	15,068	17.6	251.1	3.2	0.2	254.5
Liquor Stores	955	3,300	2,435	5,735	12.7	185.2	1.5	0.7	187.3
Confectionery and soft drink stores	6,171	6,368	15,520	21,888	26.5	252.6	0.3	10.4	263.4
Fish, chip and hamburger shops	5,343	9,608	13,229	22,837	28.1	259.7	0.7	9.8	270.2
Bread and cake shops	2,272	4,014	9,075	13,089	24.3	106.0	1.7	1.3	108.9
Total, Food stores	47,957	99,692	127,582	227,274	429.0	5,073.8	25.1	34.5	5,133.5
Furniture and floor covering stores	2,686	10,527	5,244	15,771	59.9	606.4	2.9	4.4	613.8
Fabrics and household textile stores	2,921	3,183	9,482	12,665	30.3	228.1	1.9	1.2	231.3
Men's and boys' wear stores	3,250	9,192	5,925	15,117	44.2	373.0	1.0	2.5	376.5
Women's, girls' and infants' wear stores	8,173	4,216	28,755	32,971	76.7	641.6	0.9	0.9	643.4
Footwear stores	2,304	3,190	7,764	10,954	28.1	226.9	0.8	0.9	228.6
Total, Clothing, fabrics and furniture stores	*19,334*	*30,308*	*57,170*	*87,478*	*239.2*	*2,076.1*	*7.5*	*10.0*	*2,093.6*
Household appliance stores	3,002	12,144	6,501	18,645	76.8	700.8	13.1	53.5	767.3
Household electric appliance repairers	1,560	4,619	1,532	6,151	19.1	6.0	2.0	49.9	57.9
China, glassware and domestic hardware stores	2,142	4,580	4,604	9,184	22.9	145.0	29.7	6.9	181.6
Watchmakers and jewellers	2,211	3,484	5,656	9,140	22.6	152.8	0.4	17.1	170.3
Musical Instrument and record stores	819	1,798	1,751	3,549	10.1	105.5	2.0	1.8	109.3
Total, Household appliance and hardware stores	*9,734*	*26,625*	*20,044*	*46,669*	*151.5*	*1,110.0*	*47.2*	*129.2*	*1,286.4*

For footnotes *see* following table.

RETAIL ESTABLISHMENTS AND SELECTED SERVICE ESTABLISHMENTS: SUMMARY OF OPERATIONS, BY INDUSTRY CLASS, AUSTRALIA, 1973–74—*continued*

Industry Class	*Number of establishments at 30 June 1974*	*Employment at end of June 1974(a)*			*Wages and Salaries (b)*	*Retail Sales*	*Whole-sale Sales*	*Other operating revenue*	*Turnover*
		Males	*Females*	*Persons*					
RETAIL ESTABLISHMENTS—*continued*									
	No.	No.	No.	No.	$m	$m	$m	$m	$m
New motor vehicle dealers and motor vehicle repairers n.e.c. . . .	8,474	70,179	15,381	85,560	361.2	2,892.3	891.4	464.3	4,248.1
Used motor vehicle and parts dealers . . .	2,586	11,092	2,343	13,435	60.8	763.7	202.9	14.6	981.1
Tyre and battery retailers and tyre retreaders. . .	1,628	10,306	1,438	11,744	52.3	321.5	52.2	29.6	403.3
Service stations . . .	9,952	39,371	13,034	52,405	109.7	1,051.9	4 8	162.3	1,219.0
Smash repair workshops .	4,006	19,118	2,420	21,538	71.1	7.3	1.1	227.8	236.2
Motor cycle dealers . .	641	2,740	762	3,502	11.8	87.4	49.5	9.0	145.9
Boat and caravan dealers	883	3,001	1,067	4,068	14.7	215.9	20.6	8.3	244.9
Total, Motor vehicle dealers, petrol and tyre retailers . . .	*28,170*	*155,807*	*36,445*	*192,252*	*681.6*	*5,340.0*	*1,222.5*	*915.9*	*7,478.4*
Pharmacies . . .	5,773	9,455	21,451	30,906	80.6	612.0	1.9	4.2	618.0
Photographic equipment stores	390	879	572	1,451	4.7	43.4	0.4	1.3	45.1
Sporting goods, bicycle and toy shops . . .	2,302	4,190	3,190	7,380	14.7	158.0	3.7	4.1	165.8
Newsagents, stationers and booksellers . . .	4,185	7,575	11,896	19,471	39.4	416.5	4.3	4.0	424.9
Antique and second hand goods dealers . . .	2,838	2,670	2,720	5,390	8.2	70.3	0.5	1.2	72.1
Nurserymen and florists .	1,918	2,071	3,952	6,023	10.0	59.3	0.7	0.6	60.6
Retailers n.e.c.	2,733	3,596	4,366	7,962	13.5	101.6	1.8	11.3	114.7
Total, Other retailers .	*20,139*	*30,436*	*48,147*	*78,583*	*171.2*	*1,461.1*	*13.4*	*26.7*	*1,501.2*
Total retail establishments	**127,006**	**379,589**	**374,970**	**754,559**	**2,079.7**	**17,460.9**	**1,400.7**	**1,168.4**	**20,030.1**
SELECTED SERVICE ESTABLISHMENTS									
Cafes and restaurants . .	5,123	18,101	30,746	48,847	107.3	90.7	0.1	292.6	383.4
Licensed Hotels, Motels and Wine Saloons . . .	6,355	45,263	58,125	103,388	309.6	1,200.2	1.6	332.5	1,534.2
Total, Restaurants and licensed hotels . .	*11,478*	*63,364*	*88,871*	*152,235*	*416.9*	*1,290.9*	*1.7*	*625.1*	*1,917.6*
Licensed bowling clubs .	1,096	4,966	2,356	7,322	26.5	59.2	0.1	42.6	101.8
Licensed golf clubs . .	632	4,226	1,904	6,130	22.8	29.5	..	35.5	65.0
Licensed clubs n.e.c. . .	1,559	24,334	13,926	38,260	136.3	222.2	0.6	270.3	493.2
Total, Licensed clubs .	*3,287*	*33,526*	*18,186*	*51,712*	*185.6*	*310.9*	*0.8*	*348.4*	*660.0*
Men's hairdressing . .	2,437	3,182	515	3,697	3.4	3.8	..	16.6	20.4
Women's hairdressing and beauty salons . . .	6,912	2,714	20,047	22,761	43.3	4.2	..	110.3	105.5
Total, Hairdressing and beauty salons . .	*9,349*	*5,896*	*20,562*	*26,458*	*46.7*	*8.0*	*..*	*117.9*	*125.9*
Total, Selected service establishments . .	**24,114**	**102,786**	**127,619**	**230,405**	**649.2**	**1,609.8**	**2.5**	**1,091.3**	**2,703.6**
Total, Retail and selected service establishments.	**151,120**	**482,375**	**502,589**	**984,964**	**2,729.0**	**19,070.7**	**1,403.2**	**2,259.8**	**22,733.7**

For footnotes *see* following tables.

RETAIL ESTABLISHMENTS AND SELECTED SERVICE ESTABLISHMENTS STATES AND TERRITORIES, 1973–74

	N.S.W.	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*N.T.*	*A.C.T.*	*Aust.*
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Number of establishments at 30 June 1974	54,273	42,058	22,181	13,180	12,438	4,703	870	1,417	151,120
Persons employed at end of June 1974(*a*)—									
Males	184,782	131,136	66,217	42,075	35,614	13,451	2,842	6,258	482,375
Females	186,873	129,982	69,211	46,765	45,253	14,506	3,496	6,503	502,589
Persons	371,655	261,118	135,428	88,840	80,876	27,957	6,338	12,761	984,964
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Wages and Salaries(*b*)(*c*)	1,104.6	688.2	367.2	229.3	204.2	72.3	21.6	41.6	2,729.0
Retail Sales(*c*)	7,052.3	5,112.7	2,730.0	1,654.4	1,568.1	534.3	136.1	282.7	19,070.7
Wholesale Sales(*c*)	575.9	417.0	190.1	84.2	106.3	12.3	7.1	10.3	1,403.2
Other operating revenue(*c*)	997.9	513.7	287.9	170.1	175.6	57.9	19.3	37.4	2,259.8
Turnover(*c*)	8,626.1	6,043.3	3,208.0	1,908.7	1,850.0	604.5	162.6	330.4	22,733.7

(*a*) At end of June; includes working proprietors but excludes unpaid helpers working at least 15 hours during the week (*b*) Excludes drawings by working proprietors. (*c*) Figures relate to all establishments which operated during the year.

Value of retail sales in each commodity group, Australia, based on 1968–69 Census of Retail Establishments

The following table shows the value of retail sales of goods in each of the commodity groups specified for 1968–69 and recent years, on a comparable basis throughout. The figures for the year 1968–69 were obtained from the 1968–69 census and figures for the other years shown are estimates based on sample surveys, on a basis comparable with the 1968–69 census.

VALUE OF RETAIL SALES: COMMODITY GROUPS, AUSTRALIA(*a*)
($ million)

Commodity group	*1968–69(b)*	*1972–73*	*1973–74*	*1974–75*
Groceries	1,449.0	1,944.3	2,229.7	2,612.2
Butchers' meat	648.2	851.4	1,038.4	1,046.4
Other food(*c*)	927.9	1,259.2	1,469.1	1,709.5
Total, food and groceries	*3,025.1*	*4,054.9*	*4,737.2*	*5,368.1*
Beer, wine and spirits	1,045.5	1,575.2	1,797.4	2,054.2
Clothing and drapery	1,334.9	1,925.1	2,306.4	2,607.7
Footwear	221.8	304.5	352.5	389.9
Hardware, china and glassware(*d*)	316.7	451.0	565.2	674.8
Electrical goods(*e*)	515.0	833.9	1,034.6	1,312.2
Furniture and floor coverings	407.5	633.3	795.2	862.5
Chemists' goods	433.4	689.3	772.1	892.0
Newspapers, books and stationery	314.5	418.7	492.3	585.5
Other goods(*f*)	711.3	1,018.9	1,228.1	1,480.9
Total (excluding motor vehicles, etc.)	**8,325.7**	**11,904.8**	**14,081.0**	**16,227.8**

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) 1968–69 census results. (*c*) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, and wrapped lunches. (*d*) Excludes basic building materials, builders' hardware and supplies such as tools of trade, paint, etc. (*e*) Includes radios, television and accessories, musical instruments, domestic refrigerators, etc. (*f*) Includes tobacco, cigarettes, etc., sporting goods, etc., but excludes grain and produce and business machines.

Total value of retail sales

TOTAL VALUE OF RETAIL SALES (EXCLUDING MOTOR VEHICLES, PARTS, PETROL, ETC.)
($ million)

Year	*N.S.W.*	*Vic.*	*Qld*	*S.A.*	*W.A.*	*Tas.*	*Aust.(a)*
1968–69(*b*)	3,196.1	2,409.7	1,098.5	721.0	650.1	250.3	8,325.7
1971–72	4,129.7	3,009.1	1,492.1	956.9	878.7	305.9	10,772.4
1972–73	4,546.2	3,351.9	1,654.1	1,047.4	965.8	339.4	11,904.8
1973–74	5,283.4	4,020.0	2,015.8	1,226.6	1,137.1	398.1	14,081.0
1974–75	6,002.8	4,606.4	2,337.8	1,456.6	1,346.2	478.0	16,227.8

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) 1968–69 census results.

Retail sales of goods at constant prices

The following table shows series of the value of retail sales of goods at constant (average 1968–69) prices. The scope of the series at constant prices is identical to that of the series at current prices. Further information concerning the sources and methods used in compiling the series is contained in the publication *Retail Sales of Goods—December quarter 1974* (Reference No. 11.4). Quarterly figures in original and seasonally adjusted terms are shown in this and subsequent issues.

Nature of the estimates at constant prices. Although money value is the only practicable measure by which the great variety of goods and services produced and exchanged can be reduced to a common unit and aggregated, it is a measure which itself is subject to change as prices change. It is therefore useful, for certain types of economic analysis, to examine estimates of the principal flows of goods and services in the economy revalued in such a way as to remove the direct effects of changes in their prices which have occurred between the periods under review. Such estimates, conventionally described as *at constant prices*, are presented in this publication for retail sales of goods. Whilst these estimates vary with changes in the quantities of the component goods, they remain measures in money terms, *expressed in prices of a base year*, and are not measures of physical volume. It is not possible either by estimates of this kind, or by any other means, to aggregate different goods in any physical sense.

In concept, the constant price estimates may be thought of as being derived by expressing the value of each retail commodity as the *product of a price and a quantity*, and by then substituting for each actual current price the corresponding price in the chosen base year. Aggregates at constant prices for each period are then obtained by summation. It is not possible in practice to use this method of revaluation because data on the quantities of retail commodities sold are not obtained in the Quarterly Survey of Retail Establishments. The method adopted is to use *independently constructed composite price indexes* to effect the revaluation.

In building up values at constant prices, quantities of individual commodities are, in effect, weighted by their prices in the base year. As prices do not all move in the same proportions, or even in the same direction, the choice of a particular base year may affect the trend of the constant price series. Furthermore the significance of price weights becomes more uncertain as the interval increases between any period and the base year of the series.

Estimates at constant prices are, of necessity, subject to approximations and assumptions, and they should not be interpreted in any precise quantitative sense.

Methods. For each of the commodity groups for which there are estimates of the value of retail sales at current prices, values at constant prices are derived by dividing the current price value by a *composite price index* which is specially constructed for this purpose. It should be noted that for consistency with the direct revaluation of quantities at base year prices, the price indexes used should have weights relating to the current period rather than fixed weights. However, in the main, the indexes used are of necessity *fixed weights indexes* and so the results of the revaluation at the commodity group level are only approximations to the desired results. The constant price estimates derived for each commodity group are combined to obtain four broad commodity groups for publication.

The *price indexes* used to effect the revaluation are mainly relevant components of the Consumer Price Index. Additional price information is utilised where appropriate Consumer Price Index components are not available. These price indexes are weighted together to form composite price indexes for commodity groups. In general, the *weights* used are derived from information collected in the Retail Censuses. 1961–62 Census data are used in the weighting of price indexes for the revaluation of the value of retail sales obtained from the quarterly surveys based on the 1961–62 Census and 1968–69 Census data are used in the weighting of price indexes for the revaluation of the value of retail sales obtained from the quarterly surveys based on the 1968–69 Census. In many cases where Retail Census data are insufficiently detailed for weighting purposes weighting information is obtained from other data sources.

VALUE OF RETAIL SALES OF GOODS AT CONSTANT (AVERAGE 1968–69) PRICES BY BROAD COMMODITY GROUPS: AUSTRALIA(*a*)

($ million)

	1961–62 Census Base		*1968–69 Census Base*				
Broad commodity group	*1970–71*	*1971–72*	*1968–69*	*1971–72 (b)*	*1972–73*	*1973–74*	*1974–75*
Food and drink	4,166.2	4,317.4	4,070.6	4,590.0	4,783.9	4,866.5	4,903.3
Clothing, hardware, electrical and furniture	2,856.7	2,941.4	2,795.9	3,355.7	3,586.7	3,957.3	3,914.3
Other	1,635.2	1,630.7	1,459.2	1,608.4	1,658.8	1,772.9	1,826.7
Total (excluding motor vehicles, parts, petrol, etc.)	*8,658.1*	*8,889.5*	*8,325.7*	*9,554.1*	*10,029.4*	*10,596.7*	*10,644.3*

(*a*) Excludes Northern Territory and Australian Capital Territory. (*b*) 1968–69 Census results.

ENTERPRISE STATISTICS—INTEGRATED ECONOMIC CENSUSES 1968–69

The first integrated economic censuses conducted by the Australian Bureau of Statistics were in respect of the year 1968–69, and included censuses of mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries. A large body of establishment and commodity statistics, as well as industry concentration statistics (*see* page 1081) was published in respect of these censuses. In addition, detailed statistics were published in respect of *enterprises** and these are summarised below.

The business units, as standardised for purposes of the integrated economic censuses, are at three levels: the establishment (and associated administrative offices and ancillary units); the enterprise; and the enterprise group.

The central unit from which statistical information was collected is the *enterprise*, defined broadly as the unit comprising all operations in Australia of a single operating legal entity. The term *legal entity* is used to cover a sole proprietor, or partnership, or company, but also includes co-operative societies and some government authorities mainly engaged in the industries included in the censuses.

The group of legal entities owned or controlled by a single company is recognised as a separate type of unit—the *enterprise group*. The basic unit for which most data were collected and tabulated is the *establishment*, defined in general as a unit comprising all the operations carried on by the one enterprise at a single physical location—such as an individual factory, shop or mine.

Each of the different levels of business unit defined above tends to be appropriate for the collection and dissemination of statistics relating to a particular aspect of economic activity. Statistics relating to aspects of economic operations are most appropriately collected and tabulated at the establishment level. With the development of more complex diverse business undertakings, especially those cutting across industrial, geographic and national boundaries, there has been an increasing interest in statistics relating to management and ownership. Such statistics are often more appropriately collected and tabulated in respect of enterprises. Statistics can also be collected and tabulated for the highest level of business unit, the enterprise group. Information about sources and uses of funds, overseas investment and the degree of concentration of ownership or control over the output of industries usually takes account of the characteristics of the enterprise group, although the information tabulated may relate to lower level units.

In the Integrated Economic Censuses, information was collected using a common framework of reporting units (enterprises and establishments as defined above) and data concepts and in accordance with a standard industrial classification (the *Australian Standard Industrial Classification*). As a result the statistics for the industries covered by the censuses are provided with no overlapping or gaps in scope, so that aggregates for economic data such as value added, employment, wages and salaries, fixed capital expenditure and stocks are obtained on a consistent basis for all industries and business units covered by the censuses. A detailed description of the integration of economic censuses is contained in Chapter 31, Year Book No. 56, 1970.

Definitions of data items

The information shown in the tables for the various items defined below relates to all the operations of enterprises (within the scope of the censuses) in existence at any time during the year 1968–69, unless otherwise stated.

Number of enterprises. The number of enterprises mainly engaged in mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries.

Persons employed at the end of June 1969. Working proprietors at 30 June 1969 and employees on the payroll for the last pay period in June 1969. In the case of enterprises operating wholesale trade, retail trade or selected service establishments, unpaid helpers working at least 15 hours during the last week of June are included.

Wages and salaries. The wages and salaries paid during the year ended June 1969 to all employees of the enterprise.

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* The relevant publication is *Integrated Economic Censuses 1968–69, Enterprise Statistics: Details by Industry Class, Australia* (Ref. No. 17.15).

Turnover. Sales of goods to other enterprises, commission revenue and repair and service revenue received from other enterprises, government bounties and subsidies and all other operating revenue from outside the enterprise except rent and leasing revenue, interest, royalties, dividends and receipts for administrative services provided to related enterprises in Australia. Also included is the value of capital work done by the enterprise, and the value of equipment withdrawn from stock, for own use or for rental or lease outside the enterprise.

Purchases and selected expenses. Purchases by the enterprise of goods for manufacture or resale, containers, stores and supplies, together with charges for fuels and electricity, outward freight and cartage, motor vehicle running expenses, sales commission payments, repairs and maintenance, and commission and sub-contract work. Selected expenses was defined for purposes of tabulating establishment statistics and does not include wages and salaries, interest, rent, depreciation and overhead expenses such as travelling expenses, insurance premiums, legal costs, bad debts and telephone, etc. charges.

Stocks at 30 June 1968 and 30 June 1969. All the stocks of materials, fuels, etc., work-in-progress and finished goods owned by the enterprise.

Value added. Turnover, plus increase (less decrease) in the value of stocks, less purchases and selected expenses. While value added has been used in the censuses as the basic measure of an industry's contribution to total economic activity it must not be inferred that when wages and salaries are deducted from value added, the whole of the surplus is available for profit. There are additional expenses such as depreciation, workers' compensation insurance, payroll tax, income tax, rates, advertising, interest on borrowed funds, bad debts and other sundry charges which are not taken into account in arriving at value added.

Fixed capital expenditure. Outlay on new and second-hand fixed tangible assets less disposals. Includes fixed capital expenditure by enterprises for establishments not yet in operation.

Number of establishments. The number of establishments in operation during the year which were mainly engaged in mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries and which were operated by enterprises mainly engaged in these industries. Establishments which were operated by these enterprises but which were not mainly engaged in any of these industries are not included in this item.

Description of tables

The first table shows summary statistics for enterprises mainly engaged in mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries for the year ended 30 June 1969, for Australia. In this table, enterprises are classified by industry sub-division in accordance with the Australian Standard Industrial Classification (ASIC).

The second table shows selected statistics classified by broad industry and employment size of enterprise. Whereas the statistics in the first table relate to all enterprises which were in existence during the whole or any part of the year ended June 1969, the statistics in this table relate only to those enterprises which were in existence at the end of June 1969. For the purpose of preparing this table, enterprises were classified on the basis of the number of persons (including working proprietors and unpaid helpers) employed by the enterprise in the last pay-period in June 1969 (at the end of June 1969 in the case of working proprietors and unpaid helpers).

SUMMARY OF OPERATIONS BY INDUSTRY SUB-DIVISION, AUSTRALIA, 1968-69

ASIC code	Industry description	Enterprises	Persons employed at end of June 1969	Wages and salaries	Turnover	Purchases and selected expenses	Stocks at— 30 June 1968	Stocks at— 30 June 1969	Value added	Fixed capital expenditure	Establishments (a)
		No.	No.	$m	$m	$m	$m	$m	$m	$m	No.
	Mining excluding services to mining—										
11	Metallic minerals	277	27,644	123	626	209	91	110	436	250	331
12	Coal	n.a.; Included with ASIC Sub-division '13. Crude petroleum including natural gas'.									
13	Crude petroleum including natural gas	93	12,599	63	219	93	13	16	129	164	146
14	Construction materials	522	6,806	25	146	67	10	10	79	11	749
15	Other non-metallic minerals	195	1,210	3	15	6	1	2	9	10	234
11–15	*Total mining excluding services to mining*	*1,087*	*48,259*	*214*	*1,007*	*375*	*116*	*138*	*653*	*435*	*1,460*
	Manufacturing—										
21–22	Food, beverages and tobacco	4,221	198,046	577	4,123	2,902	520	563	1,264	145	6,250
23	Textiles	820	61,989	170	746	430	168	172	321	32	991
24	Clothing and footwear	3,334	118,021	250	851	467	144	155	395	19	3,620
25	Wood, wood products and furniture	5,711	81,122	216	873	492	123	130	388	25	6,180
26	Paper and paper products, printing	3,189	102,213	330	1,232	619	163	172	622	86	3,460
27	Chemical, petroleum and coal products	997	62,484	228	1,532	876	296	291	652	101	1,510
28	Non-metallic mineral products	1,356	58,015	196	781	391	116	125	400	62	1,942
29	Basic metal products	524	100,361	379	1,861	1,055	355	387	837	186	729
31	Fabricated metal products	4,607	109,472	331	1,294	713	220	234	596	45	5,108
32	Transport equipment	1,351	108,031	355	1,631	929	330	350	721	61	1,560
33	Other machinery and equipment	4,341	185,044	578	2,155	1,203	504	573	1,021	88	5,164
34	Miscellaneous manufacturing	2,612	69,919	203	826	450	160	176	392	41	2,933
21–34	*Total manufacturing*	*33,063*	*1,254,717*	*3,811*	*17,904*	*10,526*	*3,099*	*3,329*	*7,608*	*890*	*39,447*
36	Total electricity and gas	59	60,278	236	815	246	69	72	571	286	127
46–47	Total wholesale trade	25,446	345,846	992	13,187	11,010	1,790	2,157	2,545	229	33,296
48	Total retail trade	121,060	701,543	1,154	11,966	9,200	1,205	1,316	2,877	158	133,992
91–93	Total selected service industries	25,665	216,352	352	1,756	916	42	48	845	95	27,053
	Total retail trade and selected service industries	*146,725*	*917,895*	*1,506*	*13,723*	*10,116*	*1,247*	*1,363*	*3,723*	*253*	*161,045*
	Total enterprises covered in censuses	206,380	2,626,995	6,760	46,636	32,274	6,321	7,059	15,099	2,092	235,375

(a) Includes only establishments predominantly engaged in industries included within the scope of the censuses which were operated by enterprises within the scope of the censuses. It should be noted that the other items of data relate to the enterprise as a whole.

SELECTED STATISTICS BY BROAD INDUSTRY AND EMPLOYMENT SIZE ENTERPRISES AT END OF JUNE 1969, AUSTRALIA

ASIC code	Industry description and employment size of enterprise	Enterprises	Persons employed at end of June 1969	Wages and salaries	Turnover	Value added	Establishments (a)
		No.	No.	$m	$m	$m	No.
11–15	Mining excluding services to mining—						
	Less than 10 persons	715	2,242	4.9	26.1	15.6	744
	10 to 19 persons	96	1,267	4.3	28.1	17.8	129
	20 to 49 persons	70	2,095	7.7	34.1	19.7	117
	50 to 99 persons	42	2,951	12.7	46.7	28.9	76
	100 to 499 persons	55	12,334	54.9	257.5	156.8	176
	500 or more persons	25	27,190	129.0	610.7	413.0	131
	Total	*1,003*	*48,079*	*213.5*	*1,003.1*	*651.8*	*1,373*
21–34	Manufacturing—						
	Less than 10 persons	18,418	75,299	154.7	745.3	343.1	18,595
	10 to 19 persons	5,962	81,209	215.8	862.3	385.1	6,306
	20 to 49 persons	4,393	133,553	365.8	1,520.0	637.7	4,953
	50 to 99 persons	1,626	111,846	321.2	1,488.8	590.3	2,278
	100 to 499 persons	1,535	315,935	950.3	4,790.7	1,913.9	3,599
	500 or more persons	357	536,849	1,784.7	8,388.0	3,718.6	2,907
	Total	*32,291*	*1,254,691*	*3,792.6*	*17,795.2*	*7,588.7*	*38,638*
36	Electricity and gas—						
	Less than 10 persons	14	68	0.2	1.0	0.6	17
	10 to 19 persons	4	59	0.2	0.6	0.3	4
	20 to 49 persons	9	218	0.7	4.1	2.0	12
	50 to 99 persons	5	305	1.0	5.7	2.0	7
	100 to 499 persons	9	2,174	7.4	28.8	19.8	9
	500 or more persons	14	57,454	226.9	775.0	547.2	74
	Total	*55*	*60,278*	*236.2*	*815.2*	*571.8*	*123*
46–47	Wholesale trade—						
	Less than 10 persons	18,780	66,883	139.3	2,148.0	400.4	19,215
	10 to 19 persons	2,887	38,012	106.2	1,476.8	264.7	3,547
	20 to 49 persons	1,520	38,652	128.9	1,973.1	317.8	2,507
	50 to 99 persons	492	33,478	97.8	1,257.8	244.3	1,367
	100 to 499 persons	343	68,382	205.0	3,117.3	490.1	2,335
	500 or more persons	80	100,399	309.7	3,006.9	800.5	2,916
	Total	*24,102*	*345,806*	*986.9*	*12,979.9*	*2,517.8*	*31,887*
48	Retail trade—						
	Less than 10 persons	107,726	349,984	358.3	4,792.9	1,207.9	109,771
	10 to 19 persons	5,919	76,122	155.3	1,354.2	339.5	8,121
	20 to 49 persons	1,881	53,689	126.3	1,213.2	272.5	3,815
	50 to 99 persons	414	28,412	71.7	791.7	168.1	1,461
	100 to 499 persons	299	58,048	140.6	1,416.3	324.8	3,050
	500 or more persons	67	135,229	291.1	2,186.6	511.8	2,959
	Total	*116,306*	*701,484*	*1,143.3*	*11,754.8*	*2,824.5*	*129,177*
91–93	Selected service industries—						
	Less than 10 persons	19,263	71,372	80.7	482.5	228.1	19,437
	10 to 19 persons	3,273	43,792	73.1	376.8	172.0	3,580
	20 to 49 persons	1,687	49,029	91.1	453.6	208.2	2,008
	50 to 99 persons	331	22,149	41.6	181.4	91.3	483
	100 to 499 persons	135	22,269	44.8	170.7	100.6	252
	500 or more persons	9	7,696	16.0	54.3	31.7	309
	Total	*24,698*	*216,307*	*347.2*	*1,719.2*	*831.8*	*26,069*

For footnotes *see* end of table.

SELECTED STATISTICS BY BROAD INDUSTRY AND EMPLOYMENT SIZE
ENTERPRISES AT END OF JUNE 1969, AUSTRALIA—*continued*

ASIC code	Industry description and employment size of enterprise	Enterprises	Persons employed at end of June 1969	Wages and salaries	Turnover	Value added	Establishments (a)
		No.	No.	$m	$m	$m	No.
	Total enterprises covered in censuses—						
	Less than 10 persons	164,916	565,848	738.1	8,195.8	2,195.7	167,779
	10 to 19 persons	18,141	240,461	554.8	4,098.8	1,179.3	21,687
	20 to 49 persons	9,560	277,236	720.5	5,198.1	1,457.8	13,412
	50 to 99 persons	2,910	199,141	545.9	3,772.1	1,124.9	5,672
	100 to 499 persons	2,376	479,142	1,403.0	9,781.2	3,005.9	9,421
	500 or more persons	552	1,343,959	2,757.5	15,021.7	6,022.8	9,296
	Total	**198,455**	**3,105,787**	**6,719.8**	**46,067.7**	**14,986.5**	**227,267**

(a) Includes only establishments predominantly engaged in industries included within the scope of the censuses which were operated by enterprises within the scope of the censuses. It should be noted that the other items of data relate to the enterprise as a whole.

INDUSTRY CONCENTRATION STATISTICS

In 1974 the ABS published the first statistics relating to *Industry concentration* compiled from data collected in the Integrated Economic Censuses in respect of the year ended 30 June 1969*. These statistics supplement the enterprise statistics (*see* page 1077) and the large body of establishment and commodity statistics published in respect of these censuses. Industry concentration statistics have subsequently been compiled and published for the manufacturing sector from data collected in the 1972–73 Manufacting Census.†

Meaning and limitations of concentration statistics

Industry concentration statistics are concerned with providing measures of the extent to which a few firms are dominant in individual industries. They are a useful aid in assessing the degree of competition existing among firms engaged in an industry.

In interpreting the measures of industry concentration presented in the tables, several qualifications should be borne in mind. In particular, the use of these statistics to evaluate the competitive position of firms should be approached with caution for the following reasons:

(*a*) An industry comprises all establishments (factories, shops, mines etc.) classified to it on the basis of their *predominant* activity (e.g. in the case of manufacturing, on the basis of the commodities which account for the major part of their production). These statistics provide measures of concentration for whole industries; they are not measures of concentration in the markets for individual commodities.

(*b*) The statistics of industry concentration do not take account of the effect on domestic market supplies, of overseas imports and exports of commodities.

Types of unit

In order to consider the measurement of industry concentration it is necessary to understand the definitions of the types of business units identified and standardised for the purpose of the integrated censuses. The business units are at three levels: the establishment, the enterprise and the enterprise group (*see* page 1077 for the definitions of each level of unit).

Industry concentration statistics are concerned with measuring the degree of control over industry operations (as measured by *establishment* statistics) which is exercised by a few *enterprise groups.* For this purpose, only those establishments which are under common ownership or control (i.e. which are owned or controlled by the same enterprise group) and *which are mainly engaged in a particular industry* are brought together to represent the involvement of that enterprise group in that industry.

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* The relevant publication is *Integrated Economic Censuses: 1968–69, Industry Concentration Statistics, Details by Industry Class, Australia* (17.14).

† The relevant publication is *Industry Concentration Statistics, Manufacturing Census 1972–73, Australia* (12.33).

Definitions of data items

The information shown in the tables for the various items defined below* relates to establishments in operation at any time during the year 1968–69, unless otherwise stated.

Number of enterprise groups. Number of enterprise groups owning or controlling establishments which were mainly engaged in mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries and which were in operation at the end of the census year.

Number of establishments. The number of establishments in operation at the end of the census year mainly engaged in the above industries.

*Turnover**†. Sales of goods (including transfers out of goods to other establishments of the same enterprise); bounties and subsidies on production; all other operating revenue from outside the enterprise (such as commission, repair and service revenue); capital work done for own use or for rental or lease.

Value added. Turnover plus increase (less decrease) in the value of stocks, less purchases and selected expenses. Value added is the basic measure of an industry's contribution to total economic activity. The item *purchases and selected expenses* refers to purchases of goods (including transfers in of goods from other establishments of the same enterprise) for manufacture or resale, containers, stores and supplies, together with charges for fuels and electricity, outward freight and cartage, motor vehicle running expenses, sales commission payments, repairs and maintenance and commission and sub-contract work.

Persons employed at end of June. Working proprietors at 30 June and employees on payroll for the last pay period in June including those employed at separately located administrative offices and ancillary units. In the case of retail trade and selected services establishments, unpaid helpers working at least 15 hours during the last week of June are included.

Fixed capital expenditure. Outlay on new and second-hand fixed tangible assets, less disposals. Includes fixed capital expenditure during the census year on establishments not in operation by the end of the census year.

Description of tables

The tables below present a summary of industry concentration. Selected statistics and concentration ratios are shown for mining, manufacturing, electricity and gas production and distribution, wholesale trade, retail trade and selected service industries for the year ended 30 June 1969 and for manufacturing industry for the year ended 30 June 1973.

Method used to calculate concentration ratios

Establishments (and related administrative offices and ancillary units) engaged in an industry and belonging to the same enterprise group were brought together and the data reported for them were aggregated. In this way it was possible to identify the contribution to industry totals by establishments operating under common ownership or control, i.e. to measure the involvement, in terms of these items, of an enterprise group in an industry.

Enterprise groups were ranked in descending order according to the size of the contribution of *their* establishments to the total *turnover* of the industry.

For the purpose of compiling the table, the ranked enterprise groups were brought together into the following cumulative size categories: largest 12 enterprise groups; largest 25 enterprise groups; largest 50 enterprise groups; largest 100 enterprise groups; and largest 200 enterprise groups.

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* Concentration ratios relating to 'Turnover' are not shown in the table. However, 'Turnover' was used as the basis for ranking enterprise groups according to the size of the contribution of their establishments to an industry.

† Sales to establishments operated by another enterprise which is owned or controlled by the *same enterprise group* are included.

SELECTED STATISTICS AND CONCENTRATION RATIOS BY BROAD INDUSTRY AUSTRALIA, 1968-69

ASIC code	Industry description and item		Industry total	*Enterprise groups ranked by contribution to industry turnover*				
				Largest 12	*Largest 25*	*Largest 50*	*Largest 100*	*Largest 200*
11–15	Mining excluding services to mining—							
	Enterprise groups	No.	1,114	12	25	50	100	200
		Ratio		0.01	0.02	0.04	0.09	0.18
	Establishments	No.	1,494	90	214	298	396	557
		Ratio		0.06	0.14	0.20	0.27	0.37
	Value added	$m	750	444	580	660	705	728
		Ratio		0.59	0.77	0.88	0.94	0.97
	Persons employed at end of June 1969	No.	55,519	26,949	36,696	44,668	49,795	52,191
		Ratio		0.49	0.66	0.80	0.90	0.94
	Fixed capital expenditure	$m	303	74	124	235	274	278
		Ratio		0.24	0.41	0.76	0.90	0.92
21–34	Manufacturing—							
	Enterprise groups	No.	26,330	12	25	50	100	200
		Ratio		..	..	..	..	0.01
	Establishments	No.	35,940	402	654	1,017	1,654	2,381
		Ratio		0.01	0.02	0.03	0.05	0.07
	Value added	$m	7,475	1,202	1,568	2,134	2,814	3,657
		Ratio		0.16	0.21	0.29	0.38	0.49
	Persons employed at end of June 1969	No.	1,289,583	160,698	212,598	300,720	407,770	538,038
		Ratio		0.12	0.16	0.23	0.32	0.42
	Fixed capital expenditure	$m	903	156	208	327	433	514
		Ratio		0.17	0.23	0.36	0.48	0.57
36	Electricity and gas production and distribution—							
	Enterprise groups	No.	180	12	25	50	100	..
		Ratio		0.07	0.14	0.28	0.56	..
	Establishments	No.	218	16	37	76	136	..
		Ratio		0.07	0.17	0.35	0.62	..
	Value added	$m	760	597	669	723	756	..
		Ratio		0.79	0.88	0.95	0.99	..
	Persons employed at end of June 1969	No.	71,124	52,265	60,373	66,447	70,584	..
		Ratio		0.73	0.85	0.93	0.99	..
	Fixed capital expenditure	$m	377	302	335	352	376	..
		Ratio		0.80	0.89	0.93	1.00	..
46–47	Wholesale trade—							
	Enterprise groups	No.	23,608	12	25	50	100	200
		Ratio		..	..	..	..	0.01
	Establishments	No.	33,343	947	1,355	1,881	2,582	3,985
		Ratio		0.03	0.04	0.06	0.08	0.12
	Value added	$m	2,776	370	496	703	871	1,168
		Ratio		0.13	0.18	0.25	0.31	0.42
	Persons employed at end of June 1969	No.	358,817	25,509	40,377	59,432	80,696	116,300
		Ratio		0.07	0.11	0.17	0.22	0.32
	Fixed capital expenditure	$m	186	13	20	50	62	81
		Ratio		0.07	0.11	0.27	0.33	0.44

SELECTED STATISTICS AND CONCENTRATION RATIOS BY BROAD INDUSTRY AUSTRALIA, 1968–69—*continued*

				Enterprise groups ranked by contribution to industry turnover				
ASIC code	*Industry description and item*		*Industry total*	*Largest* 12	*Largest* 25	*Largest* 50	*Largest* 100	*Largest* 200
48	Retail trade—							
	Enterprise groups	No.	112,414	12	25	50	100	200
		Ratio		..	..	..	..	..
	Establishments	No.	129,930	2,114	2,778	3,483	4,392	5,724
		Ratio		0.02	0.02	0.03	0.03	0.04
	Value added	$m	2,870	421	500	599	724	864
		Ratio		0.15	0.17	0.21	0.25	0.30
	Persons employed at end of June 1969	No.	701,523	105,350	121,665	138,128	158,180	180,364
		Ratio		0.15	0.17	0.20	0.23	0.26
	Fixed capital expenditure	$m	148	29	37	35	38	45
		Ratio		0.20	0.25	0.24	0.26	0.30
91–93	Selected service industries—							
	Enterprise groups	No.	24,372	12	25	50	100	200
		Ratio		..	..	..	..	0.01
	Establishments	No.	26,341	457	715	920	1,021	1,168
		Ratio		0.02	0.03	0.03	0.04	0.04
	Value added	$m	864	50	85	119	157	205
		Ratio		0.06	0.10	0.14	0.18	0.24
	Persons employed at end of June 1969	No.	220,739	10,524	18,607	25,058	32,126	41,004
		Ratio		0.05	0.08	0.11	0.15	0.19
	Fixed capital expenditure	$m	96	4	5	10	13	20
		Ratio		0.04	0.05	0.10	0.14	0.20
	Total industries covered in censuses—							
	Enterprise groups	No.	180,828	12	25	50	100	200
		Ratio		..	..	..	..	..
	Establishments	No.	227,266	2,360	2,724	4,890	6,637	9,272
		Ratio		0.01	0.01	0.02	0.03	0.04
	Value added	$m	15,495	1,540	2,477	3,297	4,360	5,734
		Ratio		0.10	0.16	0.21	0.28	0.37
	Persons employed at end of June 1969	No.	2,697,305	215,416	303,783	422,333	566,720	755,064
		Ratio		0.08	0.11	0.16	0.21	0.28
	Fixed capital expenditure	$m	2,013	154	404	492	715	918
		Ratio		0.08	0.20	0.24	0.36	0.46

SELECTED STATISTICS AND CONCENTRATION RATIOS BY BROAD INDUSTRY AUSTRALIA, 1972-73

				Enterprise groups ranked by contribution to industry turnover				
ASIC code	*Industry description and item*		*Industry total*	*Largest* 12	*Largest* 25	*Largest* 50	*Largest* 100	*Largest* 200
21–34	Manufacturing—							
	Enterprise groups	No.	30,389	12	25	50	100	200
		Ratio		..	..	..	..	0.01
	Establishments	No.	36,437	452	788	1,249	2,001	2,829
		Ratio		0.01	0.02	0.03	0.05	0.08
	Value added	$m	10,746	1,563	2,156	3,087	4,189	5,429
		Ratio		0.15	0.20	0.29	0.39	0.51
	Persons employed at end of June 1973	No.	1,325,610	160,986	229,871	326,843	442,277	581,427
		Ratio		0.12	0.17	0.25	0.33	0.44
	Fixed capital expenditure	$m	1,244	306	382	479	611	762
		Ratio		0.25	0.31	0.38	0.49	0.61

INTERSTATE TRADE

Prior to the federation of the Australian Colonies (now States) each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Australian Government under the provisions of the Constitution (section 93). On the expiry of the 'bookkeeping' period these records were discontinued as from 13 September 1910, and the last published statements were for the year 1909. Later, the Governments of Western Australia and Tasmania revived the records, and relevant statistics are available again for those States. A detailed collection for Queensland was re-introduced from July 1953.

At the Conference of Statisticians held in January 1928 it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities. Complete interstate trade statistics are now published in detail for Queensland, Western Australia and Tasmania by the Deputy Commonwealth Statisticians in those States, and incomplete statistics, relating mainly to trade with Western Australia and Tasmania, by the Deputy Commonwealth Statisticians in the remaining States.

STATISTICAL ORGANISATION IN AUSTRALIA

A brief outline of the legislative background and current developments of the ABS is contained in the *First Annual Report of the Australian Bureau of Statistics*, 1975–76.

For a summary of early development of Australian statistics and the origins of the ABS *see* Year Book No. 60, 1974 (page 1115).

ABS Statistical and other Official Publications of Australia Publications

The Central and State offices of the Australian Bureau of Statistics issue approximately 2,400 publications (650 separate titles) in printed and mimeographed form annually. Information on these publications is contained in *Publications of the Australian Bureau of Statistics* (1.8), available free on request from the Australian Statistician, Canberra. This contains a list of all Bureau publications, a subject index to show the Central Office publications in which information on the various subjects dealt with by the Bureau is to be found, and short descriptions of major Central Office publications. The information on issues in this publication is supplemented in monthly statements. At the end of this Year Book there is a list of the current printed publications of the Central Office of the Bureau: the prices shown after the number and year of issue are, in order, price excluding postage, and price including postage in Australia.

Commonwealth and State Parliamentary and Departmental Reports and Papers

No comprehensive list of current publications of this nature is available, but the National Library of Australia issues a quarterly publication (with annual cumulation) *Australian Government Publications*, a list of official publications of the Commonwealth, States and Territories, compiled from records of material received by the Library during the year.

The Australian Government Publishing Service, Canberra, issues a monthly publication *Australian Government Publications*. This publication lists Commonwealth publications currently becoming available or in stock, showing the titles and prices of Parliamentary Papers, Parliamentary Debates (Hansard), records of Parliamentary proceedings, Acts, Statutory Rules, Ordinances, and departmental bulletins and reports issued annually or irregularly.

Australian Government publications may be purchased *through the mail* from Mail Order Sales, Australian Government Publishing Service, P.O. Box 84, Canberra, A.C.T. 2600; *over the counter* from the Government Publications and Inquiry Centres in each State capital; and ABS publications may also be purchased *through the mail or over the counter* from the Deputy Commonwealth Statistician in each State capital.

The National Library of Australia issues annually a publication *Australian Books*. *See* the chapter Cultural Activities, Recreation and Travel for further information concerning the National Library's publicising of Australian publications.

STATISTICAL SUMMARY: AUSTRALIA

In earlier issues of the Year Book, it was the practice to include in the Statistical Summary figures for every tenth year of the period 1861 to 1901, plus the latest year for which data were available. In each subsequent issue the latest year available was substituted for the year immediately preceding it until the next tenth year had been reached, and the earliest year in the series was eliminated as space was needed. In consequence of this system no single issue of the Year Book contained a continuous yearly series.

In this and recent issues of the Year Book, this defect has been remedied in part by the inclusion of a continuous series back to the year 1941 where possible, with earlier tenth years back to 1901 (the National Accounts series has been carried back to 1900–01 in single years). In issue No. 39, pages xxviii–xxix, some of the series are shown for every tenth year from 1861 to 1941. There are, however, discrepancies between the original series and the series now published.

Breaks in series, preliminary figures, etc., are indicated by the symbols shown on page xiii of this Year Book.

STATISTICAL SUMMARY: AUSTRALIA

DEMOGRAPHY

Year ended 31 December—	Population(a)			Natural increase	Overseas migration(b)	Marriages		Divorces (c) and judicial separations	Births		Deaths		Infant deaths	
	Males	Females	Persons			No.	Rate(d)		No.	Rate(d)	No.	Rate(d)	No.	Rate(e)
	'000	'000	'000	'000	'000	'000		No.	'000		'000		'000	
1901 .	2,005	1,820	3,825	56.6	17.8	28	7.3	398	103	27.2	46	12.2	10.7	103.6
1911 .	2,382	2,192	4,574	74.3	77.7	39	8.8	509	122	27.2	48	10.7	8.4	68.5
1921 .	2,799	2,712	5,511	82.1	17.3	47	8.6	1,490	136	25.0	54	9.9	9.0	65.7
1931 .	3,333	3,220	6,553	61.9	−10.8	39	6.0	1,969	119	18.2	57	8.7	5.0	42.1
1941 .	3,599	3,545	7,144	(f) 63.3	(g) 5.2	75	10.6	3,351	135	18.9	(h) 71	(h) 10.0	5.3	39.7
1947 .	3,828	3,810	7,638	(f) 108.9	(g) 10.6	76	10.1	8,803	182	24.1	(h) 73	(h) 9.7	5.2	28.5
1948 .	3,909	3,884	7,792	101.1	55.1	75	9.7	7,253	178	23.1	77	10.0	4.9	27.8
1949 .	4,047	3,998	8,046	106.0	150.0	73	9.2	6,626	181	22.9	75	9.5	4.6	25.3
1950 .	4,191	4,116	8,307	112.4	152.5	76	9.2	7,428	191	23.3	78	9.6	4.7	24.5
1951 .	4,311	4,217	8,528	111.5	111.4	77	9.2	7,330	193	23.0	82	9.7	4.9	25.2
1952 .	4,426	4,314	8,740	120.1	94.0	74	8.6	7,110	202	23.4	82	9.5	4.8	23.8
1953 .	4,503	4,399	8,903	122.0	42.9	71	8.0	8,043	202	22.9	80	9.1	4.7	23.3
1954 .	4,598	4,492	9,090	120.5	68.2	71	7.9	6,528	202	22.5	82	9.1	4.5	22.5
1955 .	4,714	4,598	9,312	125.6	97.3	72	7.8	6,782	208	22.6	82	8.9	4.6	22.0
1956 .	4,829	4,702	9,531	126.0	94.0	72	7.6	6,492	212	22.5	86	9.1	4.6	21.7
1957 .	4,930	4,814	9,744	135.4	78.7	74	7.6	6,374	220	22.9	85	8.8	4.7	21.4
1958 .	5,026	4,921	9,947	138.8	65.4	74	7.5	6,994	223	22.6	84	8.5	4.6	20.5
1959 .	5,132	5,029	10,161	137.8	76.8	74	7.4	7,370	227	22.6	89	8.9	4.9	21.5
1960 .	5,253	5,139	10,392	141.9	90.1	75	7.3	6,709	230	22.4	88	8.6	4.6	20.2
1961 .	(i) 5,374	(i) 5,268	(i) 10,643	(i) 151.8	61.5	77	7.3	6,751	240	22.8	89	8.5	4.7	19.5
1962 .	5,470	5,376	10,846	144.4	62.5	79	7.4	7,290	237	22.2	93	8.7	4.8	20.4
1963 .	5,572	5,484	11,055	141.3	71.6	81	7.4	7,515	236	21.6	95	8.7	4.6	19.5
1964 .	5,683	5,597	11,280	129.1	99.3	86	7.7	7,967	229	20.6	101	9.0	4.4	19.1
1965 .	5,794	5,712	11,505	123.7	104.9	94	8.2	8,534	223	19.6	100	8.8	4.1	18.5
1966 .	5,891	5,814	11,705	119.2	86.9	(i) 96	(i) 8.3	9,921	(i) 224	(i) 19.3	(i) 105	(i) 9.0	(i) 4.2	(i) 18.7
1967 .	5,992	5,920	11,912	126.6	91.9	100	8.5	9,747	229	19.4	103	8.7	4.2	18.3
1968 .	6,108	6,037	12,146	131.4	113.1	106	8.8	10,791	241	20.0	110	9.1	4.3	17.8
1969 .	6,238	6,169	12,407	143.7	129.0	112	9.2	10,984	250	20.4	106	8.7	4.5	17.9
1970 .	6,365	6,299	12,663	144.5	122.9	116	9.3	12,249	258	20.6	113	9.0	4.6	17.9
1971 .	6,484	6,424	12,908	165.7	84.6	118	9.2	13,002	276	21.6	111	8.7	4.8	17.3
1972 .	6,570	6,521	13,091	155.2	27.8	114	8.8	15,636	265	20.4	110	8.5	4.4	16.7
1973 .	6,656	6,613	13,269	136.8	40.4	113	8.6	16,165	248	18.8	111	8.4	4.1	16.5
1974 .	6,765	6,720	13,485	129.3	87.1	111	8.3	17,551	245	18.3	116	8.7	4.0	16.1
1975 .	6,818	6,783	13,601	124.0	−8.1	104	7.7	24,307	233	17.2	109	8.1	3.3	14.3

(a) At 31 December. (b) Excess of arrivals over departures. Minus sign (—) indicates excess of departures over arrivals. (c) Decrees made absolute, including decrees for nullity of marriage. (d) Number per 1,000 of mean population. (e) Number per 1,000 live births. (f) Excess of births over civilian deaths from September 1939 to June 1947. (g) Excludes movements of defence personnel from September 1939 to June 1947. (h) Excludes deaths of defence personnel from September 1939 to June 1947. (i) Includes Aborigines.

PRIMARY INDUSTRIES

AGRICULTURE

Season	*Wheat*			*Oats*			*Barley*			*Maize*		
	Area	*Production*	*Average yield*	*Area*	*Production*	*Average yield*	*Area*	*Production*	*Average yield*	*Area*	*Production*	*Average yield*
	mil hectares	mil tonnes	tonnes	'000 hectares	mil tonnes	tonnes	'000 hectares	mil tonnes	tonnes	'000 hectares	mil tonnes	tonnes
1901–02	2.07	1.05	0.51	187	0.18	0.95	30	0.03	1.14	119	0.18	1.50
1911–12	3.01	1.95	0.65	250	0.17	0.70	47	0.05	0.99	138	0.23	1.65
1921–22	3.93	3.51	0.89	297	0.22	0.74	121	0.14	1.14	124	0.20	1.61
1931–32	5.97	5.18	0.87	439	0.28	0.63	139	0.14	1.03	109	0.18	1.65
1941–42	4.86	4.53	0.93	591	0.40	0.68	317	0.41	1.29	122	0.19	1.55
1947–48	5.62	5.98	1.06	852	0.74	0.87	339	0.47	1.39	90	0.16	1.74
1948–49	5.09	5.18	1.02	716	0.43	0.60	409	0.40	0.99	74	0.13	1.79
1949–50	4.95	5.93	1.20	707	0.50	0.70	421	0.44	1.05	78	0.15	1.94
1950–51	4.72	5.00	1.06	711	0.46	0.64	437	0.52	1.19	69	0.12	1.75
1951–52	4.20	4.34	1.03	957	0.63	0.65	452	0.50	1.10	69	0.10	1.49
1952–53	4.13	5.30	1.28	1,119	0.79	0.71	557	0.79	1.43	70	0.13	1.79
1953–54	4.35	5.38	1.24	865	0.60	0.69	730	0.94	1.28	72	0.13	1.78
1954–55	4.32	4.58	1.06	1,042	0.60	0.57	684	0.67	0.97	69	0.13	1.88
1955–56	4.11	5.31	1.29	1,357	1.02	0.76	766	0.94	1.23	68	0.12	1.78
1956–57	3.19	3.65	1.15	1,034	0.64	0.62	847	1.12	1.32	73	0.14	1.90
1957–58	3.58	2.65	0.74	1,197	0.57	0.48	858	0.69	0.81	74	0.14	1.92
1958–59	4.21	5.84	1.39	1,608	1.58	0.98	963	1.43	1.48	73	0.17	2.35
1959–60	4.93	5.39	1.09	1,226	0.85	0.69	963	0.78	0.81	75	0.17	2.28
1960–61	5.44	7.43	1.37	1,472	1.38	0.94	1,145	1.54	1.35	75	0.16	2.12
1961–62	5.96	6.71	1.13	1,253	1.00	0.80	965	0.94	0.98	85	0.19	2.18
1962–63	6.66	8.34	1.25	1,332	1.25	0.94	820	0.90	1.09	85	0.19	2.23
1963–64	6.67	8.91	1.34	1,373	1.24	0.90	815	0.98	1.21	87	0.17	1.96
1964–65	7.25	10.02	1.38	1,415	1.27	0.90	835	1.12	1.34	86	0.17	2.03
1965–66	7.09	7.05	1.00	1,525	1.10	0.72	930	0.95	1.02	80	0.12	1.57
1966–67	8.43	12.67	1.50	1,723	1.94	1.13	1,011	1.40	1.38	82	0.19	2.33
1967–68	9.08	7.55	0.83	1,368	0.72	0.53	1,057	0.83	0.79	81	0.18	2.23
1968–69	10.85	14.80	1.37	1,567	1.71	1.09	1,341	1.65	1.23	67	0.15	2.24
1969–70	9.49	10.55	1.11	1,374	1.25	0.91	1,521	1.70	1.12	80	0.19	2.41
1970–71	6.48	7.89	1.22	1,553	1.61	1.04	2,000	2.35	1.18	86	0.21	2.47
1971–72	7.14	8.61	1.21	1,241	1.28	1.03	2,535	3.07	1.21	78	0.21	2.74
1972–73	7.60	6.59	0.87	995	0.74	0.74	2,140	1.73	0.81	59	0.14	2.34
1973–74	8.95	11.99	1.34	1,182	1.11	0.94	1,894	2.40	1.27	46	0.11	2.32
1974–75	8.31	11.36	1.37	897	0.87	0.98	1,826	2.51	1.38	51	0.13	2.59
1975–76p	8.56	11.82	1.38	987	1.14	1.16	2,328	3.18	1.40	51	0.13	2.81

AGRICULTURE—*continued*

Season	*Hay*			*Potatoes*			*Sugar-cane(a)*			*Vineyards*		*All crops*
	Area	*Production*	*Average yield*	*Area*	*Production*	*Average yield*	*Area*	*Production*	*Average yield*	*Area*	*Wine made*	*Area*
	'000 hectares	'000 tonnes	tonnes	'000 hectares	'000 tonnes	tonnes	'000 hectares	'000 tonnes	tonnes	'000 hectares	mil. litres	mil. hectares
1901–02	683	2,057	3.01	44	328	7.4	35	1,390	39.5	26	24	3.4
1911–12	1,019	2,914	2.86	53	306	5.8	41	1,709	41.8	25	23	4.9
1921–22	1,212	3,965	3.27	60	394	6.5	52	2,476	47.7	37	39	6.2
1931–32	1,066	3,218	3.02	59	403	6.9	98	4,281	43.8	46	65	8.6
1941–42	1,116	3,632	3.25	40	338	8.4	103	5,236	50.8	53	71	(*b*)8.3
1947–48	797	3,056	3.83	59	506	8.6	90	4,489	49.9	54	149	(*b*)9.1
1948–49	639	2,329	3.64	48	467	9.6	108	6,815	63.2	55	149	(*b*)8.5
1949–50	650	2,469	3.80	54	479	8.8	114	6,959	61.1	55	149	(*b*)8.4
1950–51	557	2,096	3.76	51	418	8.1	110	7,165	65.1	55	118	(*b*)8.1
1951–52	627	2,382	3.80	48	517	10.8	114	5,412	47.5	55	160	(*b*)8.1
1952–53	713	2,809	3.94	55	438	8.0	113	7,079	62.5	55	136	(*b*)8.4
1953–54	783	3,098	3.96	52	557	10.7	138	9,159	66.5	56	144	(*b*)8.7
1954–55	803	2,902	3.61	43	476	10.9	151	10,248	67.7	55	109	9.0
1955–56	907	3,683	4.06	38	408	10.8	151	9,044	59.9	55	104	9.3
1956–57	753	3,092	4.10	41	527	12.9	150	9,421	62.9	53	140	8.1
1957–58	905	3,016	3.33	48	585	12.2	152	9,397	61.8	53	154	9.0
1958–59	1,221	5,171	4.23	42	584	13.8	150	10,377	69.4	53	148	10.4
1959–60	852	3,227	3.79	44	589	13.4	127	9,147	72.0	53	129	10.6
1960–61	1,203	5,160	4.29	37	458	12.3	138	9,313	67.5	53	154	12.0
1961–62	920	3,752	4.08	38	534	14.0	157	9,730	62.1	54	190	12.0
1962–63	1,101	4,793	4·35	46	677	14.7	163	12,940	79.6	54	136	13.0
1963–64	1,053	4,338	4.12	41	571	13.8	169	12,313	72.9	55	172	13.0
1964–65	1,130	5,043	4.46	36	516	14.5	190	15,312	80.4	56	177	14.0
1965–66	1,125	4,246	3.77	39	649	16.7	204	14,382	70.6	57	156	14.0
1966–67	1,415	6,473	4.58	40	653	16.3	226	16,953	75.1	56	190	16.0
1967–68	502	1,246	2.48	43	669	15.6	224	17,025	76.1	57	202	16.3
1968–69	428	1,728	4.04	46	811	17.7	230	18,708	81.3	58	239	16.6
1969–70	428	1,514	3.54	43	762	17.6	213	15,784	74.2	61	294	15.6
1970–71	349	1,274	3.65	39	774	20.1	221	17,645	80.0	64	255	13.4
1971–72	341	1,247	3.66	40	822	20.3	234	19,391	83.0	67	290	14.3
1972–73	453	1,224	2.70	37	721	19.7	242	18,928	78.3	69	280	14.3
1973–74	325	1,034	3.22	34	649	19.0	226	19,278	85.4	70	295	15.2
1974–75	216	669	3.10	38	742	19.7	253	20,418	80.7	71	n.a.	13.9
1975–76p	232	726	3.14	35	nya	nya	257	21,959	85.4	70	n.a.	14.7

(*a*) Cane cut for crushing. (*b*) Excludes Northern Territory.

PRIMARY INDUSTRIES—*continued*

PASTORAL, DAIRYING, ETC.

Year ended 30 June—	*Livestock(a)*				*Wool (b)(c)*	*Butter*	*Cheese*	*Meat(d)*			
	Horses	*Cattle*	*Sheep*	*Pigs*				*Beef and veal*	*Mutton and lamb*	*Pigmeat*	*Total meat*
	mil.	mil.	mil.	mil.	mil. kg	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes
1902	1.6	8.5	72	0.9	245	(*e*)46	(*e*)5.3	n.a.	n.a.	n.a.	n.a.
1912	2.3	11.8	97	1.1	362	(*e*)96	(*e*)7.2	n.a.	n.a.	n.a.	n.a.
1922	2.4	14.4	86	1.0	328	(*e*)121	(*e*)14.8	345	222	51	618
1932	1.8	12.3	111	1.2	457	177	14.3	355	312	72	739
1942	1.6	13.6	125	1.4	529	170	30.6	542	378	124	1,043
1948	1.2	13.8	103	1.3	456	165	42.1	571	300	91	962
1949	1.1	14.1	109	1.2	480	168	43.9	587	326	95	1,007
1950	1.1	14.6	113	1.1	518	176	45.5	616	364	92	1,072
1951	1.0	15.2	116	1.1	507	167	45.0	662	279	87	1,027
1952	0.9	14.9	118	1.0	490	137	41.3	591	287	86	964
1953	0.9	15.2	123	1.0	581	170	47.4	686	401	84	1,171
1954	0.8	15.6	127	1.2	565	162	49.8	716	371	85	1,171
1955	0.8	15.8	131	1.3	582	194	45.9	731	394	101	1,227
1956	0.8	16.5	139	1.2	643	212	39.3	763	386	95	1,245
1957	0.7	17.3	150	1.3	710	196	45.9	828	373	90	1,290
1958	0.7	16.9	149	1.4	650	179	36.6	804	428	103	1,336
1959	0.7	16.3	153	1.3	722	197	44.5	921	500	104	1,525
1960	0.6	16.5	155	1.4	762	201	45.7	764	583	102	1,449
1961	0.6	17.3	153	1.6	737	185	47.9	643	584	109	1,336
1962	0.6	18.0	158	1.7	770	202	56.6	804	596	122	1,522
1963	0.5	18.5	159	1.4	759	206	59.6	929	603	116	1,648
1964	0.5	19.1	165	1.5	810	207	59.2	1,001	595	113	1,710
1965	0.5	18.8	171	1.7	809	206	62.6	1,026	594	122	1,743
1966	n.a.	17.9	158	1.7	754	209	59.6	946	608	135	1,690
1967	0.5	18.3	164	1.8	799	222	69.8	879	596	142	1,617
1968	n.a.	19.2	167	2.1	803	196	70.5	904	665	150	1,718
1969	n.a.	20.6	175	2.3	885	198	74.8	935	680	162	1,777
1970	0.5	22.2	180	2.4	926	223	76.3	1,010	755	174	1,940
1971	n.a.	24.4	178	2.6	891	203	77.6	1,047	825	182	2,054
1972	n.a.	27.4	163	3.2	880	195	80.9	1,168	956	194	2,319
1973	n.a.	29.1	140	3.3	735	185	93.4	1,438	713	236	2,388
1974	n.a.	30.9	145	2.5	701	175	95.8	1,310	457	211	1,978
1975	n.a.	32.8	152	2.2	794	(*f*)161	(*f*)98.6	1,534	520	175	2,229
1976	n.a.	33.4	149	2.2	747	148	112.5	1,783	584	176	2,543

(*a*) At 31 December of previous year for years to 1942, at 31 March thereafter. (*b*) In terms of greasy. (*c*) 1901–02 and 1911–12, year ended previous December; then until 1946–47, year ended March; 1947–48 onwards, year ended June. (*d*) Carcass weight in terms of fresh meat. (*e*) Year ended previous December. (*f*) From 1974–75 excludes the production of certain small producers.

MINERALS

Year ended 31 December—	*Copper(a)*	*Gold(a)*	*Lead(a)*	*Zinc(a)*	*Iron ore*	*Black and brown coal*	*Crude oil*
	'000 tonnes	'000 grams	'000 tonnes	'000 tonnes	mil. tonnes	mil. tonnes	'000 cu m
1901	29.9	102,642	n.a.	(*b*)	n.a.	7.0	..
1911	46.1	77,263	225.3	241.9	(*b*)	10.7	..
1921	11.2	23,577	82.3	141.7	0.7	13.1	..
1931	13.9	18,510	150.8	75.4	(*b*)	10.8	..
1941	22.7	46,553	295.7	251.2	2.5	19.1	..
1948	12.8	27,542	213.6	193.8	2.1	21.8	..
1949	14.0	27,653	215.2	194.7	1.5	21.8	..
1950	17.9	27,046	229.0	201.0	2.4	24.3	..
1951	18.4	27,855	215.4	192.3	2.5	25.9	..
1952	19.2	30,495	232.0	199.6	2.9	27.9	..
1953	38.1	33,442	273.7	243.2	3.3	27.1	..
1954	42.6	34,766	289.4	256.7	3.6	29.6	..
1955	48.1	32,629	300.7	260.7	3.6	29.9	..
1956	55.4	32,031	304.3	282.5	4.0	30.3	..
1957	60.2	33,714	339·1	324.0	3.9	31.2	..
1958	76.9	34,338	333.6	298.4	4.0	32.6	..
1959	96.5	33,751	321.4	279.8	4.2	33.9	..
1960	111.2	33,800	313.1	322.6	4.4	38.1	..
1961	97.2	33,476	274.0	316.2	5.4	40.9	..
1962	108.7	33,245	376.0	342.9	4.9	42.3	..
1963	114.8	31,849	416.9	357.1	5.6	44.0	..
1964	105.7	29,979	380.9	350.1	5.8	47.2	198
1965	91.8	27,298	367.9	354.8	6.8	52.9	417
1966	111.3	28,521	370.8	375.3	11.1	56.0	539
1967	91.8	25,049	381.8	407.0	17.3	59.0	1,208
1968	109.6	24,316	388.8	422.4	26.6	64.2	2,206
1969(*e*)	125.3	22,713	417.7	444.4	32.5	66.8	2,238
1970(*e*)	142.3	20,496	459.4	502.0	45.1	72.8	4,872
1971(*e*)	173.0	19,108	416.4	444.1	57.1	72.9	14,937
1972(*e*)	171.9	23,253	420.8	497.5	62.1	77.2	19,038
1973(*e*)	198.7	26,002	385.0	507.0	74.6	83.9	20,669
1974(*e*)	246.7	16,271	370.4	441.3	91.5	85.6	23,096
1975(*e*)	235.6	15,061	416.5	508.2	98.2	97.7	23,096
1976(*e*)	217.6	17,079	390.9	467.6	92.7	98.6	23,891

FORESTRY

Year ended 30 June—	*Sawn output of Aust. grown timber*
	'000 cu m
1902	(*c*)1,067
1912	(*c*)1,428
1922	1,392
1932	559
1942	2,157
1949	2,794
1950	2,886
1951	2,976
1952	3,287
1953	3,162
1954	3,304
1955	3,419
1956	3,424
1957	3,348
1958	3,282
1959	3,445
1960	3,589
1961	3,346
1962	3,190
1963	3,341
1964	3,509
1965	3,615
1966	3,558
1967	3,448
1968	3,476
1969	(*d*)3,325
1970	(*d*)3,386
1971	3,438
1972	3,367
1973	3,408
1974p	3,339
1975p	2,799

(*a*) Metallic content of minerals produced. (*b*) Less than 0.05. (*c*) Year ended previous December. (*d*) Excludes estimated quantity of timber from logs peeled or sliced for veneers. (*e*) Year ended 30 June.

SECONDARY INDUSTRIES

FACTORIES(*a*)

				Net value of production(*d*)							Value of	
Year ended 30 June—	Number	Persons employed (*b*)	Salaries and wages paid(*c*)	Chemicals, etc.	Industrial metals, etc.	Textiles, etc.	Clothing	Food, etc.	Paper, etc.	All groups	Plant and machinery(*e*)	Land and buildings(*e*)
	'000	'000	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1902(*f*)	(*g*)	(*g*)	(*g*)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	58.2	n.a.	n.a.
1912(*f*)	14.5	312	55	2.2	24.1	15.0		23.6	8.5	108.3	63.2	65.0
1922	18.0	379	136	6.4	47.2	38.4		54.4	18.0	225.0	156.2	134.6
1932	21.7	337	112	15.8	45.6	13.8	22.2	57.4	19.2	222.0	243.1	213.2
1942	27.0	725	360	59.6	239.8	42.0	47.2	106.4	34.2	633.0	338.4	312.7
1949	40.1	890	678	67.1	421.7	71.7	104.5	179.6	70.6	1,137.5	493.0	465.5
1950	41.6	917	772	81.3	492.5	85.9	115.4	202.0	86.0	1,323.1	571.2	519.1
1951	43.1	969	983	105.4	654.0	109.2	143.5	236.6	109.5	1,687.7	673.2	605.6
1952	45.8	978	1,224	127.4	826.2	113.2	162.2	282.2	136.4	2,049.7	820.3	719.0
1953	47.7	933	1,270	135.7	842.6	129.7	165.6	328.7	136.6	2,165.7	987.1	828.9
1954	49.6	990	1,410	164.6	936.6	157.1	187.1	355.8	158.6	2,454.1	1,161.4	966.9
1955	51.1	1,031	1,563	196.3	1,065.9	156.8	196.8	373.1	181.1	2,731.0	1,396.6	1,112.0
1956	52.4	1,060	1,707	238.3	1,193.9	163.6	204.9	395.6	198.1	3,001.4	1,595.7	1,307.1
1957	53.2	1,063	1,782	273.8	1,281.7	182.9	211.0	428.9	217.4	3,244.2	1,834.1	1,519.4
1958	54.0	1,074	1,859	291.3	1,389.0	183.0	216.1	449.9	241.4	3,457.4	2,025.5	1,698.1
1959	54.9	1,088	1,941	322.4	1,471.6	191.3	221.5	469.1	263.4	3,685.2	2,216.8	1,895.8
1960	56.7	1,132	2,173	360.3	1,700.4	216.7	237.7	520.1	298.2	4,161.1	2,443.2	2,129.2
1961	57.8	1,145	2,289	366.1	1,795.9	213.6	247.2	542.5	318.6	4,349.8	2,785.6	2,389.1
1962	58.5	1,121	2,287	364.3	1,770.3	211.2	252.4	495.5	326.9	4,394.6	3,052.1	2,809.6
1963	59.1	1,168	2,447	411.4	1,954.7	233.8	266.3	636.9	350.9	4,795.2	3,286.5	3,006.8
1964	59.4	1,210	2,652	449.5	2,174.0	252.5	281.4	700.5	379.7	5,270.0	3,480.7	3,204.7
1965	61.0	1,269	2,994	504.8	2,486.1	279.6	302.3	757.1	426.9	5,896.8	3,766.3	3,505.9
1966	61.7	1,294	3,163	542.7	2,647.8	282.8	319.0	818.3	459.5	6,251.9	4,154.7	3,776.6
1967	62.5	1,309	3,408	627.6	2,912.9	303.1	341.5	892.3	503.3	6,877.0	4,706.8	4,061.2
1968	63.0	1,331	3,666	687.0	3,163.6	315.0	360.1	937.5	549.0	7,430.9	4,962.2	4,303.2
1969(*h*)	35.9	1,264	3,908	633.0	3,201.6	301.0	409.2	1,184.4	620.7	7,475.5	n.a.	n.a.
1970	35.7	1,297	4,329	681.8	3,551.9	310.3	452.1	1,321.9	701.8	8,261.7	n.a.	n.a.
1972	36.1	1,303	5,257	804.1	4,052.0	333.7	521.5	1,683.9	818.1	9,703.2	n.a.	n.a'
1973	36.4	1,298	5,820	885.5	4,337.7	376.8	563.9	1,943.5	915.4	10,746.0	n,a.	n.a.
1974	37.1	1,338	7,177	1,076.2	5,529.4	481.1	676.1	2,126.0	1,110.5	13,149.2	n.a.	n.a.
1975(*i*)	27.0	1,245	8,531	1,172.2	6,635.8	409.2	696.8	2,650.5	1,279.4	15,246.4	n.a.	n.a.

(*a*) Excludes Northern Territory and Australian Capital Territory before 1 July 1964. (*b*) Average over whole year; includes working proprietors. (*c*) Excludes amounts drawn by working proprietors. (*d*) Value added in process of manufacture (i.e. value of outpu less value of materials and fuel used). (*e*) Depreciated or book value at end of year, including estimated value of rented premises and machinery. (*f*) Year ended previous December. (*g*) Owing to variation in classification, effective comparison is not possible. (*h*) Direct comparison with figures for previous years are not possible (for details, *see* page 729). (*i*) All manufacturing establishments owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed.

PRIMARY INDUSTRIES

GROSS VALUE OF PRODUCTION OF PRIMARY INDUSTRIES

Year ended 30 June—	Crop production	Pastoral	Dairying	Poultry	Bee-farming	Total Agriculture	Hunting	Forestry	Fishing	Total primary excluding mining
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1902	47.6	54.4	15.2	4.0	0.2	121.4	n.a.	(*a*)5.6	(*b*)	127.0
1912	77.6	105.4	32.2	8.0	0.2	223.4	n.a.	9.6	2.2	235.2
1922	163.8	150.2	70.6	18.0	0.2	402.8	n.a.	18.2	2.8	423.8
1932	149.0	123.1	66.1	17.1	0.2	355.5	3.2	15.4	3.3	377.4
1942	201.0	198.7	91.1	24.8	0.9	516.4	10.8	23.3	4.2	554.7
1948	566.1	432.9	151.7	53.4	1.6	1,205.7	15.7	40.0	8.0	1,269.4
1949	445.6	535.8	170.4	62.0	3.4	1,217.2	17.1	46.0	9.6	1,289.9
1950	563.5	744.3	202.2	67.0	1.7	1,578.6	12.8	50.7	9.8	1,651.9
1951	557.0	1,510.5	221.0	74.9	1.9	2,365.3	14.4	62.2	11.3	2,453.2
1952	664.3	899.6	260.6	97.0	1.7	1,923.3	14.8	82.7	13.3	2,034.1
1953	765.9	1,115.0	337.7	109.7	2.4	2,330.8	12.6	86.6	15.8	2,445.8
1954	743.9	1,115.3	347.1	109.9	3.2	2,319.4	11.5	94.7	17.7	2,443.3
1955	679.3	1,058.7	363.9	103.0	3.2	2,208.0	11.2	99.1	19.5	2,337.8
1956	769.9	1,036.2	395.7	107.6	3.9	2,313.2	13.4	110.0	19.6	2,456.2
1957	704.3	1,356.1	376.8	110.0	5.1	2,552.3	13.4	115.2	23.1	2,704.0
1958	681.7	1,089.8	370.7	110.9	3.8	2,256.9	13.7	114.1	22.8	2,407.5
1959	919.9	1,076.1	400.7	109.6	3.8	2,509.9	14.3	116.4	24.5	2,665.1
1960	820.7	1,275.2	425.4	119.7	5.1	2,646.1	15.4	108.1	27.2	2,796.8
1961	1,071.4	1,130.6	409.5	130.2	3.8	2,745.4	14.8	108.4	28.5	2,897.1
1962	1,008.3	1,187.3	412.5	121.7	4.0	2,733.9	13.3	100.1	31.7	2,879.0
1963	1,136.6	1,287.1	439.4	123.6	3.5	2,990.2	12.8	101.6	34.1	3,138.7
1964	1,228.4	1,562.7	463.5	138.2	6.0	3,398.9	15.0	108.0	35.4	3,557.3
1965	1,320.0	1,454.5	505.3	137.4	5.1	3,422.3	14.6	116.3	42.4	3,595.6
1966	1,181.3	1,467.8	508.0	154.6	4.3	3,316.0	15.6	120.3	45.8	3,497.7
1967	1,639.3	1,486.1	523.8	171.6	4.0	3,824.7	13.5	117.7	48.8	4,004.7
1968	1,268.8	1,395.2	504.1	169.3	4.6	3,342.1	12.1	118.8	58.5	3,531.5
1969	1,717.3	1,536.8	513.7	176.2	3.0	3,947.0	12.1	119.5	63.0	4,141.6

(*a*) Includes Fisheries. (*b*) Included in Forestry.

PRIMARY INDUSTRIES—*continued*

The classification categories 'Pastoral', 'Dairying', 'Poultry' and 'Bee-farming' employed in the previous table have been replaced by a more appropriate commodity classification. Direct comparison with figures for previous years is not possible.

GROSS VALUE OF PRODUCTION OF PRIMARY INDUSTRIES

Year ended 30 June—	*Crops*	*Livestock slaughterings and other disposals(a)*	*Livestock products*	*Total Agriculture*	*Forestry*	*Fishing*	*Hunting*
	$m	$m	$m	$m	$m	$m	$m
1970 . . .	1,453.8	1,007.7	1,268.6	3,730.1	125.0	63.3	12.5
1971 . . .	1,477.4	1,009.9	1,079.0	3,566.4	137.2	77.2	10.2
1972 . . .	1,585.1	1,134.4	1,237.1	3,956.6	151.2	91.8	10.2
1973 . . .	1,569.7	1,542.2	1,834.0	4,945.9	170.6	100.3	12.1
1974 . . .	2,846.1	1,696.0	1,859.0	6,401.1	193.3	108.6	12.5
1975 . . .	3,193.4	1,019.2	1,655.1	5,867.7	212.6	106.6	13.8
1976p . .	3,202.3	1,164.8	1,605.0	5,972.1	207.9	140.2	17.6

(*a*) Includes adjustment for net exports (overseas and interstate) of live animals.

GROSS VALUE OF PRODUCTION				BUILDING			WAGES AND PRICES		
Year ended 30 June—	*Mining and quarrying*	*Factories*	*Grand total*	*New dwellings completed(a)* *number*	*New dwellings completed(a)* *value*	*Value of work done on all buildings(b)*	*Year ended 31 December—*	*Weekly wage rates index adult males(c)*	*Retail price index numbers six State capital cities combined(d)*
	$m	$m	$m	'000	$m	$m			
1902 . .	44.0	(*e*)58.2	229.2	n.a.	n.a.	n.a.	1901 . .	n.a.	88
1912 . .	46.6	(*e*)108.3	390.1	n.a.	n.a.	n.a.	1911 . .	n.a.	100
1922 . .	40.0	225.0	688.8	n.a.	n.a.	n.a.	1921 . .	n.a.	(*h*)168
1932 . .	27.0	220.0	504.8	n.a.	n.a.	n.a.	1931 . .	n.a.	145
1942 . .	66.8	633.0	1,115.0	n.a.	n.a.	n.a.	1941 . .	38.5	167
1947 . .	65.0	821.7	1,539.2	32.9	72.1	n.a.	1947 . .	49.8	198
1948 . .	85.2	978.6	2,116.3	44.3	108.6	n.a.	1948 . .	55.4	218
1949 . .	96.7	1,137.5	2,287.7	52.7	150.9	n.a.	1949 . .	59.7	240
1950 . .	104.7	1,323.1	2,813.8	57.0	184.7	n.a.	1950 . .	71.5	262
1951 . .	142.3	1,687.7	3,965.4	69.3	255.6	n.a.	1951 . .	85.8	313
1952 . .	194.4	2,049.7	3,911.4	80.1	354.1	n.a.	1952 . .	96.7	367
1953 . .	219.3	2,165.7	4,374.5	80.2	394.5	n.a.	1953 . .	99.2	383
1954 . .	209.8	2,454.1	4,644.2	77.6	398.2	n.a.	1954 . .	101.6	386
1955 . .	236.2	2,731.0	4,832.5	82.1	444.2	n.a.	1955 . .	105.2	394
1956 . .	265.0	3,001.4	5,226.1	78.5	452.5	n.a.	1956 . .	110.8	419
1957 . .	280.0	3,244.2	5,713.5	68.4	419.5	n.a.	1957 . .	112.4	429
1958 . .	253.6	3,457.4	5,547.4	74.6	463.0	811.6	1958 . .	114.3	435
1959 . .	236.7	3,685.2	5,952.7	84.2	527.3	864.9	1959 . .	122.0	443
1960 . .	252.3	4,161.1	6,580.2	90.0	571.0	1,001.6	1960 . .	125.7	459
1961 . .	278.1	4,349.8	6,815.0	94.5	627.4	1,130.8	1961 . .	129.5	471
1962 . .	274.5	4,394.6	6,823.5	86.3	593.2	1,076.9	1962 . .	129.8	469
1963 . .	291.0	4,795.2	7,472.6	87.7	610.2	1,140.7	1963 . .	133.0	472
1964 . .	327.7	5,270.0	8,372.1	96.7	685.8	1,323.9	1964 . .	140.4	483
1965 . .	400.1	5,896.8	9,041.4	112.7	823.0	1,555.9	1965 . .	144.3	502
1966 . .	443.9	6,251.9	9,295.7	112.8	869.9	1,681.2	1966 . .	152.4	517
1967 . .	515.5	6,877.0	10,390.8	111.9	914.8	1,745.4	1967 . .	159.3	534
1968 . .	568.1	7,430.9	10,553.5	120.2	1,022.8	1,914.3	1968 . .	173.4	548
1969 . .	(*f*)749.2	(*f*)7,473.5		130.7	1,182.1	2,195.4	1969 . .	183.6	564
1970 . .	(*f*)1,042.6	(*f*)8,263.7		142.2	1,379.4	2,556.7	1970 . .	191.9	586
1971 . .	(*f*)1,289.5	(*g*)n.a.		142.1	1,478.9	2,815.6	1971 . .	218.0	621
1972 . .	(*f*)1,428.3	(*f*)9,703.2		143.8	1,628.7	3,132.4	1972 . .	239.8	658
1973 . .	(*f*)1,597.3	(*f*)10,749.8		150.6	1,845.5	3,542.4	1973 . .	275.1	720
1974 . .	(*f*)1,996.1	(*f*)13,149.2		150.0	2,143.0	4,214.9	1974 . .	373.8	829
1975 . .	(*f*)2,641.1			141.1	2,454.2	4,713.3	1975 . .	417.6	954

(*a*) Series commenced 1945–46. Partly estimated before July 1951, and excludes Northern Territory before July 1954. (*b*) Building by private contractors, government authorities and owner builders. (*c*) At 31 December, Base; year 1954 = 100, weighted average. Excludes rural industry. (*d*) Base; year 1911 = 100. The index numbers are presented as a continuous series, but they give only a broad indication of long-term trends in retail price levels. They are derived by linking a number of indexes that differ greatly in scope. The successive indexes used are; from 1901 to 1914, the 'A' Series Retail Price Index; from 1914 to 1946–47, the 'C' Series Retail Price Index; from 1946–47 to 1948–49, a composite of Consumer Price Index Housing Group (partly estimated) and 'C' Series Index excluding Rent; and from 1948–49 onwards, the Consumer Price Index. (*e*) Year ended previous December. (*f*) Value added from 1968–69. (*g*) Manufacturing census was not conducted. (*h*) November.

OVERSEAS TRADE

	TOTALS		PRINCIPAL EXPORTS(a)					
			Wool		*Wheat*		*Flour(b)*	
Year ended 30 June—	*Imports*	*Exports*	*Quantity*	*Value*	*Quantity*	*Value*	*Quantity*	*Value*
	$m f.o.b.	$m f.o.b.	mil. kg (*f*)	$m f.o.b.	'000 tonnes	$m f.o.b.	'000 tonnes	$m f.o.b.
1902(*g*)	76	100	175.8	30	552	5.6	88	1.2
1912(*g*)	122	158	330.3	52	887	12.8	160	2.8
1922	188	256	440.6	96	2,720	57.2	327	11.0
1932	104	216	427.1	74	3,468	38.4	554	7.6
1942	348	338	426.3	112	608	9.2	476	8.4
1948	679	820	513 9	289	1,638	105.6	711	63.6
1949	830	1,085	601.0	454	2,260	129.4	776	67.4
1950	1,076	1,227	647.5	618	2,135	124.3	700	52.7
1951	1,488	1,964	541.5	1,253	2,346	148.3	801	65.8
1952	2,107	1.350	472.3	636	1,712	110.6	716	66.0
1953	1,028	1,743	547.8	788	1,620	103.9	789	74.8
1954	1,363	1,657	547.0	805	982	61.9	690	59.4
1955	1,687	1,548	536.5	693	1,718	90.4	595	40.6
1956	1,642	1,564	587.8	653	1,934	92.9	605	39.4
1957	1,438	1,986	658.1	930	2,479	120.1	680	43.3
1958	1,584	1,636	603.2	720	1,077	57.0	417	28.7
1959	1,593	1,623	657.1	578	1,486	76.8	406	26.7
1960	1,854	1,875	722.4	742	2,483	123.4	486	30.3
1961	2,175	1,938	706.6	649	4,164	204.9	597	38.0
1962	1,769	2,155	738.8	720	5,529	284.9	525	34.8
1963	2,163	2,152	723.2	733	4,136	216.9	475	31.4
1964	2,373	2,782	757.3	926	6,905	362.0	621	42.2
1965	2,905	2,651	728.2	781	5,714	297.2	519	37.3
1966	2,939	2,721	726.4	757	5,156	264.1	354	24.8
1967	3,045	3,024	740.3	840	6,506	361.2	324	23.1
1968	3,264	3,045	763.4	739	6,498	342.7	346	23.5
1969	3,469	3,374	796.8	827	4,891	258.3	317	21.8
1970	3,881	4,137	852.8	803	6,886	337.6	298	21.2
1971	4,150	4,376	785.0	575	9,075	433.0	278	19.6
1972	4,008	4,893	851.5	582	8,459	418.5	164	12.6
1973	4,121	6,214	805.5	1,238	5,391	273.1	157	12.1
1974	6,085	6,914	583.0	1,248	5,128	517.1	129	20.2
1975	8,083	8,673	581.1	815	7,860	1,034.4	237	49.0
1976	8,240	9,601	726.7	962	7,559	921.5	219	38.5

PRINCIPAL EXPORTS(*a*)—*continued*

Year ended 30 June—	*Butter(c)*		*Hides and skins*	*Meats(d)*	*Fruit(e)*	*Sugar*	*Gold*	*Ores and concentrates*	
								Iron	*Other*
	Quantity	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*	*Value*
	mil. kg	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
1902(*e*)	16	2.8	2.6	5.2	0.4	..	28.6	..	..
1912(*e*)	46	9.2	6.4	8.6	1.0	..	24.0	..	8.1
1922	58	16.0	6.2	11.0	6.0	..	7.0	..	1.3
1932	92	20.6	4.6	12.8	9.6	5.0	23.8	..	0.3
1942	59	16.2	12.0	28.2	10.6	5.2	18.4	..	1.9
1948	85	41.8	24.7	45.1	25.5	6.1	7.7	..	9.2
1949	84	48.3	24.4	59.5	30.3	26.4	..	..	11.8
1950	83	50.8	30.3	70.0	30.2	28.3	..	..	12.3
1951	56	37.8	54.4	60.8	37.6	29.6	..	..	21.4
1952	13	10.2	34.3	71.0	44.4	13.8	14.0	..	39.9
1953	51	40.9	40.3	131.6	61.2	43.3	40.8	..	38.9
1954	41	33.1	38.9	113.8	67.9	63.2	27.5	..	25.6
1955	64	50.0	39.4	127.0	68.0	62.3	27.4	..	28.1
1956	84	58.7	41.8	119.1	67.4	49.4	16.6	..	38.2
1957	79	52.9	48.5	100.1	52.9	57.6	28.5	..	51.4
1958	53	32.3	50.8	110.5	72.0	70.0	12.7	..	42.4
1959	80	50.9	47.1	194.4	73.1	64.3	6.6	..	32.7
1960	79	58.4	63.6	177.0	64.3	53.3	20.4	..	43.5
1961	64	40.9	54.4	144.6	61.1	70.1	79.9	..	54.4
1962	81	48.5	64.3	179.4	73.5	67.8	18.0	..	47.7
1963	81	49.3	73.7	225.7	73.3	91.0	12.9	..	43.5
1964	92	57.0	91.7	243.7	92.3	156.5	14.3	..	54.4
1965	97	67.4	80.1	286.2	86.1	112.7	18.4	0.8	76.6
1966	84	57.7	89.2	227.7	107.3	93.9	24.4	2.7	87.5
1967	104	64.8	86.3	285.5	94.5	100.0	18.1	46.0	100.3
1968	78	47.0	62.3	284.6	104.9	97.6	15.4	103.0	122.7
1969	75	40.5	75.4	291.1	92.4	122.2	22.7	179.5	142.9
1970	99	52.5	87.5	426.1	87.7	116.1	29.4	277.8	204.9
1971	89	48.0	71.3	438.3	99.8	149.6	18.1	374.3	230.8
1972	57	48.9	80.5	569.3	89.4	210.6	19.1	375.5	225.5
1973	75	62.0	188.7	866.5	116.7	249.8	24.8	439.1	237.6
1974	56	41.9	148.2	801.5	104.6	223.2	34.6	498.7	307.4
1975	33	33.8	102.2	451.0	195.8	644.5	37.3	706.4	422.4
1976	72	63.7	141.7	667.6	103.8	569.9	37.2	770.9	534.4

(*a*) Australian produce. (*b*) Flour, plain white. (*c*) Includes concentrates and ghee. (*d*) Includes sausage casings, natural. (*e*) Includes juices and fruit preparations. (*f*) Greasy equivalent (includes greasy wool, slipe, wool scoured and carbonised, wool exported on skins). (*g*) Year ended previous December.

OVERSEAS TRADE—*continued*

PRINCIPAL IMPORTS

Year ended 30 June—	*Vegetable foodstuffs, etc.*	*Apparel, etc.*	*Oil, etc.*	*Metals, etc.*	*Rubber*	*Paper, etc.*
	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
1902(*a*)	7.2	21.8	2.4	15.6	1.0	3.2
1912(*a*)	7.4	32.4	3.2	28.0	2.8	5.2
1922	8.0	62.0	9.4	45.6	3.4	8.8
1932	5.2	30.8	11.0	14.8	1.6	8.8
1942	12.3	65.3	32.4	143.6	6.0	8.7
1947	18.9	97.8	41.3	105.2	10.9	26.8
1948	33.0	192.1	69.5	170.8	9.8	46.8
1949	27.9	218.4	86.4	256.1	12.6	42.1
1950	41.4	199.5	104.8	454.7	21.4	37.8
1951	49.6	277.3	139.7	479.7	59.3	58.0
1952	50.1	407.1	174.9	786.8	68.0	137.5
1953	37.0	96.5	148.5	452.0	17.4	44.9
1954	51.4	227.6	167.0	504.4	23.7	68.2
1955	71.9	253.5	193.8	638.3	34.1	92.8
1956	44.1	222.7	199.3	644.1	44.1	87.2
1957	51.6	182.7	191.1	530.1	33.4	83.5
1958	51.5	217.0	203.4	564.4	33·3	89.8
1959	55.3	193.9	209.0	585.6	33.6	96.1
1960	54.9	222.1	213.5	710.1	48.5	103.8
1961	60.5	264.9	223.3	871.3	47.3	133.8
1962	56.3	208.4	219.8	630.3	35.5	109.6
1963	55.5	233.3	246.3	850.0	46.7	133.5
1964	61.6	234.0	251.5	947.1	51.2	141.7
1965	66.2	272.1	260.1	1,275.2	66.3	156.5

Year ended 30 June—	*Food and live animals*	*Beverages and tobacco*	*Crude materials, inedible, except fuels*	*Mineral fuels, lubricants and related materials*	*Animal and vegetable oils and fats*	*Chemicals*	*Manufactured goods classified chiefly by materials*	*Machinery and transport equipment*	*Miscellaneous manufactured articles*	*Commodities and transactions of merchandise trade not elsewhere classified*
	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.	$m f.o.b.
1966 . .	110	37	197	252	15	266	590	1,121	220	90
1967 . .	118	38	206	247	15	297	586	1,144	243	110
1968 . .	117	36	224	241	14	309	644	1,250	270	111
1969 . .	128	44	228	252	13	328	688	1,328	298	116
1970 . .	140	48	247	255	16	363	753	1,528	350	124
1971 . .	158	50	235	190	18	410	867	1,644	403	125
1972 . .	160	51	219	194	15	410	856	1,483	432	137
1973 . .	163	52	268	175	13	424	893	1,489	475	119
1974 . .	237	65	415	377	28	580	1,404	2,091	721	108
1975 . .	302	95	390	724	43	786	1,496	3,059	961	125
1976 . .	275	90	387	807	42	709	1,460	3,177	1,050	160

(*a*) Year ended previous December.

TRANSPORT AND COMMUNICATION

SHIPPING

Year ended 30 June—	*Vessels on overseas voyages*				*Overseas cargo*				*Vessels on interstate voyages Entered*		*Interstate cargo loaded*	
	Entered		*Cleared*		*Discharged*		*Loaded*					
	No.	*Net tonnage*	*No.*	*Net tonnage*					*No.*	*Net tonnage*		
		mil. tons		mil. tons	mil. tonnes	mil. cubic metres	mil. tonnes	mil. cubic metres		mil. tons	mil. tonnes	mil. cubic metres
1902	(*a*)	(*a*)	(*a*)	(*a*)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1912(*b*)	2,081	5.0	2,093	5.0	n.a.	n.a.	n.a.	n.a.	5,000	6.8	n.a.	n.a.
1922	1,567	4.6	1,544	4.5	(*c*)2.4		(*c*)5.8		4,897	6.4	(*c*)5.5	
1932	1,519	5.7	1,538	5.7	2.1	1.0	6.0	0.8	3,958	5.5	3.1	1.1
1942	1,276	5.2	1,268	5.6	3.8	2.0	2.9	1.5	4,860	6.6	8.2	2.2
1948	1,470	6.1	1,479	5.8	5.1	2.2	4.6	1.4	2,943	4.2	7.2	1.4
1949	1,706	7.5	1,780	7.5	5.9	2.9	5.5	1.5	3,091	4.7	6.3	1.3
1950	1,942	8.7	1,965	8.7	7.8	4.1	5.1	1.6	3,228	5.3	6.5	1.7
1951	1,911	8.6	1,992	8.7	9.2	4.5	5.5	1.5	3,301	5.8	6.8	1.5
1952	2,038	9.0	2,098	9.3	9.9	5.3	4.6	1.4	3,750	7.9	7.8	1.5
1953	1,988	8.7	2,053	8.9	7.9	2.2	6.1	1.6	4,555	9.2	8.6	1.4
1954	2,054	8.9	2,073	8.9	8.7	3.2	5.9	1.5	4,759	9.6	9.3	1.7
1955	2,245	9.9	2,260	10.1	11.2	3.9	6.2	1.6	4,644	9.4	10.4	1.7
1956	2,425	11.2	2,457	11.1	12.6	3.9	6.8	1.8	4,626	9.5	11.8	1.5
1957	2,628	11.8	2.662	11.8	12.8	3.1	8.9	1.6	4,805	9.5	12.1	1.5
1958	2,656	12.4	2,598	12.1	13.9	3.3	7.5	1.7	5,127	9.8	12.8	1.3
1959	2,706	12.9	2,757	13.1	14.5	3.0	8.8	1.7	5,012	9.5	12.5	1.2
1960	2,976	14.5	2,969	14.4	15.7	3.7	10.3	1.7	5,004	9.5	13.1	1.5
1961	3,382	17.3	3,396	17.0	17.5	4.3	14.0	1.8	4,860	9.6	13.9	1.7
1962	3,599	18.9	3,611	18.8	17.8	3.1	17.5	1.8	5,032	9.8	13.9	1.3
1963	3,411	19.0	3,351	18.6	19.8	3.8	15.7	1.8	4,845	9.7	14.6	1.2
1964	3,714	20.7	3,763	20.9	21.1	4.5	20.1	2.1	5,067	10.1	15.9	1.4
1965	3,813	21.7	3,788	21.7	23.6	5.0	20.8	2.2	5,263	13.2	16.6	1.6
1966	3,929	23.0	4,029	23.3	24.5	4.7	22.1	2.3	5,480	15.1	16.4	1.7
1967	3,977	27.4	4,017	27.6	27.5	4.7	33.2	2.2	4,937	15.3	15.9	2.0
1968	3,972	30.1	4,013	30.3	28.0	5.3	42.0	2.4	5,159	15.7	17.5	2.1
1969	4,390	36.4	4,360	36.2	29.8	5.9	55.8	2.3	5,269	15.8	18.8	2.2
1970	4,971	44.5	5,053	44.6	28.7	5.8	78.1	2.4	4,834	17.7	20.8	2.3
1971	5,476	50.8	5,578	51.4	21.8	5.7	101.8	3.0	4,967	23.7	24.9	2.5
1972	5,439	53.1	5,447	53.5	19.5	5.9	108.0	3.2	5,491	27.0	26.4	2.8
1973	5,647	62.6	5,631	62.0	20.2	6.1	132.4	3.5	5,215	28.8	28.0	2.9
1974	5,975	72.0	5,909	71.5	23.1	7.6	150.5	3.1	5,073	28.4	29.5	3.0
1975	6,230	80.3	5,254	80.3	21.9	8.0	164.9	2.9	4,594	25.9	28.5	3.1
1976	5,772	75.0	5,825	75.4	19.7	7.2	156.1	2.5	4,469	24.6	28.2	2.9

(*a*) Separate details not available. Total entrances and clearances for year ended December 1901, 4,028 vessels, 6.5 million tons (*b*) Year ended previous December. (*c*) Tons weight plus tons measurement.

GOVERNMENT RAILWAYS(*a*) — REGULAR INTERNAL AIR SERVICES

Year ended 30 June—	Route kilo-metres (*b*)	Train kilo-metres	Pas-senger journeys	Freight-tonnes carried	Freight-net tonne-kilo-metres	Kilo-metres flown	*Passengers* Embark-ations	*Passengers* Pas-senger kilo-metres	*Freight* Tonnes up-lifted	*Freight* Tonne-kilo-metres	*Mail* Tonnes up-lifted	*Mail* Tonne-kilo-metres
	'000	mil.	mil.	mil.	mil.	mil.	'000	mil.	'000	mil.	'000	mil.
1902	20.6	61.5	115	15.7	n.a.	..	..	..	..	..	..	..
1912	27.0	88.8	228	25.9	n.a.	..	..	..	..	..	..	..
1922	37.7	90.3	335	32.0	n.a.	..	..	..	..	..	..	..
1932	43.5	102.7	303	26.5	n.a.	1.4	6	5	0.04	n.a.	0.02	n.a.
1942	43.8	142.4	475	39.5	n.a.	12.6	151	122	1.2	1.5	n.a.	0.7
1947	43.8	137.6	503	38.4	9,165	51.5	850	589	12.4	9.8	1.2	1.0
1948	43.6	141.1	511	40.6	9,703	52.1	1,208	810	26.2	19.6	1.3	1.2
1949	43.5	148.5	507	42.1	10,158	56.6	1,409	911	33.9	25.0	1.6	1.3
1950	43.5	150.3	505	41.3	10,143	58.7	1,500	950	44.8	32.6	2.6	2.0
1951	43.5	142.7	476	41.6	10,264	65.5	1,685	1,077	53.9	39.6	2.9	2.2
1952	43.1	150.3	501	45.0	11,046	67.3	1,829	1,162	52.2	39.0	2.4	1.9
1953	43.1	142.7	498	44.7	10,750	62.9	1,706	1,073	52.3	39.7	2.1	1.8
1954	42.8	150.5	511	47.6	11,370	66.0	1,772	1,130	63.0	47.7	2.1	1.8
1955	42.8	152.6	517	48.5	11,929	70.0	1,918	1,233	71.4	54.0	2.1	1.9
1956	42.6	154.8	515	47.6	11,894	70.3	2,020	1,333	76.6	56.8	2.3	2.0
1957	42.6	153.0	499	48.3	12,203	67.8	2,125	1,434	68.1	53.0	2.3	2.0
1958	42.5	145.3	494	46.0	11,132	65.2	2,123	1,447	63.5	48.2	2.4	2.0
1959	42.3	146.9	485	48.8	11,970	64.9	2,235	1,519	57.0	42.0	2.4	2.2
1960	42.2	140.2	479	52.0	13,091	69.5	2,660	1,823	59.3	42.6	4.4	3.8
1961	42.0	149.7	463	56.3	14,370	68.1	2,639	1,786	57.2	41.2	5.4	4.5
1962	41.2	149.0	461	56.5	14,427	66.3	2,666	1,802	51.9	38.1	5.7	4.7
1963	41.0	149.6	465	56.8	15,131	70.3	2,833	1,965	53.9	41.3	5.9	4.9
1964	40.5	155.3	471	62.7	17,170	78.8	3,257	2,266	57.3	44.5	6.4	5.5
1965	40.3	155.5	464	65.9	18,224	84.2	3,764	2,638	63.5	49.5	7.0	5.9
1966	40.2	151.7	460	65.5	18,050	88.5	4,158	2,947	69.0	54.9	7.8	6.7
1967	40.3	150.8	455	69.6	18,832	91.3	4,425	3,174	74.4	58.6	8.7	7.5
1968	40.5	152.1	453	72.2	20,054	91.3	4,668	3,420	77.2	61.8	8.5	7.6
1969	40.4	151.0	447	77.0	21,463	97.1	5,185	3,865	81.6	66.5	9.0	8.0
1970	40.3	156.3	450	83.7	23,973	106.6	5,911	4,511	90.8	74.5	9.6	8.7
1971	40.3	156.3	453	87.3	25,206	114.6	6,340	4,974	91.4	78.0	9.9	9.3
1972	40.3	153.7	404	88.7	25,403	115.9	6,629	5,277	89.9	76.5	10.1	9.6
1973	40.5	152.0	377	92.5	26,582	121.6	7,503	5,543	94.4	84.0	10.1	10.1
1974	40.4	151.2	374	97.0	28,329	135.2	8,858	7,001	112.7	101.3	9.9	9.6
1975	40.6	150.6	340	103.5	29,792	138.9	9,393	7,579	107.8	100.9	9.6	9.3

(*a*) Particulars of train-kilometres, passenger journeys, freight tonnes carried, and freight net tonne-kilometres refer only to operations for which revenue is received. (*b*) At end of period.

TRANSPORT AND COMMUNICATION—*continued*

ROAD TRANSPORT — COMMUNICATION

Year ended 30 June—	*Tram trolley-bus and bus services(a)*	*Motor vehicles on the register(b)*					*Telephones*			*Broadcasting and television licences in force(b)*	
	Passenger journeys	*Motor cars and station wagons*	*Commercial vehicles (c)*	*Motor cycles*	*Total motor vehicles (including motor cycles)*	*Postal matter dealt with(d)*	*Instruments in service (b)*	*Services in operation (b)(e)*	*Telegrams (f)*	*Broadcast listeners'*	*Television viewers'*
	mil.	'000	'000	'000	'000	mil. articles	'000	'000	mil.	'000	'000
1902	n.a.	..	..	..	..	(g)384	(g)36	(g)28	(g)8.2	..	..
1912	360	n.a.	n.a.	n.a.	n.a.	(g)698	(g)118	(g)96	(g)13.9	..	..
1922	569	..	102		102	778	259	196	16.8	(h)1	..
1932	589	420	96	72	588	887	485	364	13.9	369	..
1942	(i)1,067	451	250	49	751	1,124	739	531	26.1	1,320	..
1947	1,216	548	378	87	1,013	1,235	905	648	35.7	1,678	..
1948	1,199	589	419	100	1,108	1,307	963	688	36.8	1,704	..
1949	1,185	651	457	118	1,225	1,375	1,028	734	37.9	1,763	..
1950	1,076	764	506	134	1,404	1,466	1,110	795	38.0	1,841	..
1951	1,092	879	555	146	1,580	1,526	1,209	870	37.2	1,885	..
1952	1,019	1,028	588	155	1,770	1,482	1,301	939	29.8	1,961	..
1953	988	1,105	587	148	1,840	1,506	1,383	1,001	25.9	1,986	..
1954	981	1,196	611	141	1,947	1,604	1,476	1,070	25.1	2,042	..
1955	966	1,342	654	133	2,130	1,653	1,587	1,153	25.5	2,035	..
1956	927	1,430	693	123	2,246	1,741	1,704	1,240	25.4	2,089	..
1957	833	1,537	710	118	2,366	1,784	1,814	1,318	24.0	2,107	74
1958	803	1,661	731	114	2,506	1,895	1,937	1,407	22.9	2,138	291
1959	778	1,784	755	110	2,649	1,951	2,056	1,491	22.5	2,264	578
1960	758	1,938	784	102	2,824	1,953	2,164	1,562	22.2	2,283	955
1961	726	2,070	800	93	2,963	2,048	2,266	1,631	21.8	2,256	1,217
1962	718	2,201	815	85	3,101	2,101	2,382	1,719	21.6	2,220	1,424
1963	712	2,377	832	77	3,286	2,202	2,523	1,812	21.8	2,240	1,655
1964	702	2,583	846	69	3,498	2,342	2,670	1,919	23.4	2,302	1,882
1965	685	2,792	858	65	3,715	2,443	2,811	2,010	24.3	2,358	2,045
1966	653	2,947	868	64	3,878	2,556	2,978	2,120	25.0	2,526	2,226
1967	621	3,104	880	69	4,053	2,683	3,178	2,235	25.6	2,538	2,405
1968	609	3,305	892	83	4,279	2,648	3,392	2,359	(j)23.4	2,580	2,519
1969	590	3,499	911	98	4,508	2,648	3,599	2,511	(j)23.3	2,630	2,649
1970	575	3,720	938	114	4,772	2,783	3,913	2,704	(j)23.2	2,670	2,758
1971	561	3,935	961	144	5,039	2,806	4,152	2,857	(j)21.2	2,699	2,845
1972	503	4,147	998	180	5,325	2,767	4,400	2,978	(j)20.2	2,758	2,939
1973	516	4,376	1,048	210	5,634	2,828	4,659	3,147	(j)20.4	2,814	3,013
1974	528	4,627	1,100	259	5,986	2,818	5,000	3,361	(j)20.7	(k)2,851	(k)3,022
1975	528	4,900	1,166	282	6,347	2,682	5,267	3,539	(j)18.5	..	..

(*a*) Government and municipal trolley-bus services ceased in August 1969. (*b*) At end of period. (*c*) Open and closed light commercial type vehicles, rigid and articulated trucks, other truck type vehicles and buses. (*d*) Letters, postcards, letter-cards, newspapers, packets, parcels, and registered articles. (*e*) All single lines plus one half the number of duplex lines. Until the introduction of duplex services in December 1948, statistics of exchange lines and telephone services were identical. (*f*) Telegrams despatched to places within Australia and despatched to or received from overseas. (*g*) Year ended previous December. (*h*) Year 1923–24. First year licences issued. (*i*) Tram passenger journeys only before 1942. (*j*) Excludes telegrams received from overseas. These particulars are no longer available. (*k*) Television viewer and broadcast listener's licences were abolished on 17 September 1974.

NATIONAL ACCOUNTS

	GROSS DOMESTIC PRODUCT						GROSS FIXED CAPITAL EXPENDITURE				
	At current prices			*At constant prices(a)*			*At current prices*		*At constant prices(a)*		
Year—	(*b*)	(*c*)	(*d*)	*1953–54 prices(d)*	*1959–60 prices(d)*	*1966–67 prices(d)*	(*e*)	(*d*)	*1953–54 prices(d)*	*1959–60 prices(d)*	*1966–67 prices(d)*
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1900–01	419	..	..	..	..	..	56	..	..	..	..
1901–02	444	..	..	..	..	..	74	..	..	..	..
1902–03	428	..	..	..	..	..	65	..	..	..	..
1903–04	449	..	..	..	..	..	51	..	..	..	..
1904–05	445	..	..	..	..	..	50	..	..	..	..
1905–06	478	..	..	..	..	..	53	..	..	..	..
1906–07	538	..	..	..	..	..	72	..	..	..	..
1907–08	536	..	..	..	..	..	75	..	..	..	..
1908–09	583	..	..	..	..	..	76	..	..	..	..
1909–10	624	..	..	..	..	..	80	..	..	..	..
1910–11	683	..	..	..	..	..	98	..	..	..	..
1911–12	733	..	..	..	..	..	125	..	..	..	..
1912–13	802	..	..	..	..	..	146	..	..	..	..
1913–14	865	..	..	..	..	..	154	..	..	..	..
1914–15	833	..	..	..	..	..	132	..	..	..	..
1915–16	909	..	..	..	..	..	125	..	..	..	..
1916–17	943	..	..	..	..	..	123	..	..	..	..
1917–18	963	..	..	..	..	..	112	..	..	..	..
1918–19	1,089	..	..	..	..	..	146	..	..	..	..
1919–20	1,257	..	..	..	..	..	209	..	..	..	..
1920–21	1,426	..	..	..	..	..	245	..	..	..	..
1921–22	1,378	..	..	..	..	..	261	..	..	..	..
1922–23	1,510	..	..	..	..	..	273	..	..	..	..
1923–24	1,569	..	..	..	..	..	290	..	..	..	..
1924–25	1,722	..	..	..	..	..	303	..	..	..	..
1925–26	1,659	..	..	..	..	..	308	..	..	..	..
1926–27	1,729	..	..	..	..	..	328	..	..	..	..
1927–28	1,739	..	..	..	..	..	329	..	..	..	..
1928–29	1,711	..	..	..	..	..	309	..	..	..	..
1929–30	1,566	..	..	..	..	..	240	..	..	..	..
1930–31	1,288	..	..	..	..	..	166	..	..	..	..
1931–32	1,209	..	..	..	..	..	119	..	..	..	..
1932–33	1,264	..	..	..	..	..	134	..	..	..	..
1933–34	1,356	..	..	..	..	..	156	..	..	..	..
1934–35	1,422	..	..	..	..	..	203	..	..	..	..
1935–36	1,574	..	..	..	..	..	226	..	..	..	..
1936–37	1,717	..	..	..	..	..	253	..	..	..	..
1937–38	1,857	..	..	..	..	..	306	..	..	..	..
1938–39	1,847	1,860	..	..	..	..	298	(316)	..	..	..
1939–40	..	2,040	..	..	..	..	..	..	..	..	..
1940–41	..	2,174	..	..	..	..	..	..	..	..	..
1941–42	..	2,548	..	..	..	..	..	..	..	..	..
1942–43	..	2,936	..	..	..	..	..	..	..	..	..
1943–44	..	2,986	..	..	..	..	..	..	..	..	..
1944–45	..	2,906	..	..	..	..	..	..	..	..	..
1945–46	..	3,006	..	..	..	..	..	..	..	..	..
1946–47	..	3,234	..	..	..	..	..	..	..	..	..
1947–48	..	3,988	..	..	..	..	..	..	..	..	..
1948–49	..	4,524	4,324	7,261	..	..	..	792	1,350	..	..
1949–50	..	..	5,099	7,844	..	..	..	1,064	1,652	..	..
1950–51	..	..	6,773	8,304	..	..	..	1,524	2,049	..	..
1951–52	..	..	7,267	8,539	..	..	..	1,938	2,194	..	..
1952–53	..	..	8,242	8,466	..	..	..	1,937	1,983	..	..
1953–54	..	..	9,013	9,013	10,464	..	..	2,128	2,128	2,511	..
1954–55	..	..	9,603	9,493	11,082	..	..	2,353	2,294	2,698	..
1955–56	..	..	10,405	10,023	11,642	..	..	2,567	2,380	2,811	..
1956–57	..	..	11,332	10,281	11,862	..	..	2,667	2,380	2,819	..
1957–58	..	..	11,588	10,435	12,124	..	..	2,856	2,499	2,951	..
1958–59	..	..	12,448	11,370	13,019	..	..	3,022	2,614	3,085	..
1959–60	..	..	13,718	11,991	13,718	16,344	..	3,405	2,886	3,405	3,947
1960–61	..	..	14,591	..	14,155	16,899	..	3,671	..	3,569	4,160
1961–62	..	..	14,928	..	14,300	17,103	..	3,730	..	3,579	4,180
1962–63	..	..	16,089	..	15,191	18,213	..	4,020	..	3,842	4,476
1963–64	..	..	17,840	..	16,316	19,501	..	4,516	..	4,242	4,938
1964–65	..	..	19,598	..	17,522	20,851	..	5,269	..	4,806	5,583
1965–66	..	..	20,544	..	17,697	21,216	..	5,719	..	5,074	5,907
1966–67	..	..	22,571	..	18,907	22,571	..	6,009	..	5,161	6,009
1967–68	..	..	24,063	..	..	23,417	..	6,534	..	..	6,355
1968–69	..	..	27,074	..	..	25,488	..	7,262	..	..	6,817
1969–70	..	..	29,941	..	..	26,963	..	7,913	..	..	7,119
1970–71	..	..	32,928	..	..	28,160	..	8,778	..	..	7,438
1971–72	..	..	36,725	..	..	29,417	..	9,594	..	..	7,611
1972–73	..	..	41,852	..	..	30,681	..	10,041	..	..	7,488
1973–74	..	..	50,692	..	..	32,455	..	11,906	..	..	7,921
1974–75	..	..	59,531	..	..	32,415	..	14,337	..	..	7,768
1975–76	..	..	69,673	..	..	32,899	..	16,689	..	..	7,779

(*a*) For a description of constant price estimates, *see Australian National Accounts, op. cit. pp 15 and 104.* (*b*) N. G. Butlin, *Australian Domestic Product, Investment and Foreign Borrowing* 1861—1938–39, Cambridge University Press, Cambridge, 1962. Gross domestic product excluding livestock accumulation approximates conceptually gross domestic product as defined in the Australian National Accounts. (*c*) Published by the Commonwealth Statistician. Figures prior to 1948–49 are from *National Income and Expenditure* 1955–56 and are not strictly comparable with subsequent figures because of a number of definitional changes and statistical revisions; *see* pages 18–19, 117–20, *Australian National Accounts* 1948–49 *to* 1961–62, Commonwealth Bureau of Census and Statistics. (*d*) *Australian National Accounts* 1974–75, Australian Bureau of Statistics, and, for the last five years, the Budget Paper No. 9, *National Income and Expenditure* 1974–75. The figure of $316m for gross fixed capital expenditure in 1938–39 is based on a reconstruction of earlier estimates, and is approximately consistent with the present Australian National Account series. (*e*) N. G. Butlin, *op. cit.* For a variety of reasons, Professor Butlin's gross domestic capital formation figures given here differ conceptually from those for gross fixed capital expenditure in the Australian National Accounts.

PRIVATE FINANCE

NOTE ISSUE

BANKING

Year ended 30 June—	Australian note issue (a)	Trading banks		Bank clearings (c)	Savings banks
		Advances (b)	Deposits (b)		Depositors balances(d)
	$m	$m	$m	$m	$m
1902	. .	188	186	13	62
1912	16	238	300	25	118
1922	107	364	578	65	308
1932	103	522	638	55	396
1942	205	648	965	142	549
				Debits to customers' accounts(c)	
1948	393	824	1,598	451	1,363
1949	426	966	1,830	514	1,428
1950	463	1,148	2,264	655	1,524
1951	551	1,357	2,826	897	1,675
1952	605	1,656	2,564	866	1,784
1953	657	1,450	2,856	877	1,895
1954	688	1,690	3,061	1,100	2,020
1955	726	1,982	3,089	1,127	2,145
1956	745	1,945	2,992	1,123	2,282
1957	763	1,897	3,231	1,250	2,455
1958	775	2,060	3,240	1,282	2,594
1959	790	2,007	3,362	1,432	2,783
1960	843	2,211	3,611	1,737	3,045
1961	839	2,238	3,600	1,654	3,155
1962	856	2,287	3,837	1,848	3,470
1963	869	2,465	4,064	2,028	3,940
1964	870	2,610	4,649	2,318	4,476
1965	862	2,955	5,038	2,653	4,887
1966	849	3,183	5,308	2,672	5,254
1967	938	3,548	5,614	2,978	5,765
1968	1,006	4,020	6,087	3,588	6,222
1969	1,107	4,384	6,706	4,055	6,707
1970	1,216	4,903	7,099	4,891	7,105
1971	1,369	5,317	7,431	5,711	7,635
1972	1,499	5,876	8,322	6,200	8,391
1973	1,751	7,854	11,072	8,085	10,238
1974	2,112	10,120	12,714	8,988	11,196
1975	2,557	11,205	14,936	10,095	12,790
1976	2,921	12,560	16,956	13,368	(e)14,823

(a) Last Wednesday in June. (b) June quarter up to and including 1942; weekly average for month of June from 1947 onwards. (c) Weekly average, June month. (d) End of June. (e) Data from June 1975 have been revised to reflect a change in accounting procedures by one bank.

LIFE INSURANCE(a)(b)

	Ordinary(c)		Industrial		Total	
	Policies	Sum assured	Policies	Sum assured	Policies	Sum assured
	'000	$m	'000	$m	'000	$m
1901	414	216	236	10	650	226
1911	484	218	467	20	951	238
1921	730	362	973	60	1,703	422
1931	871	570	1,550	134	2,421	704
1941	1,340	926	2,780	254	4,120	1,180
1947	1,902	1,481	3,541	386	5,442	1,867
1948	2,071	1,669	3,643	418	5,714	2,087
1949	2,224	1,862	3,725	448	5,949	2,310
1950	2,377	2,094	3,793	477	6,170	2,571
1951	2,554	2,424	3,843	507	6,396	2,931
1952	2,731	2,757	3,873	541	6,604	3,298
1953	2,893	3,105	3,881	571	6,774	3,677
1954	3,033	3,482	3,827	594	6,860	4,076
1955	3,184	3,942	3,766	615	6,949	4,556
1956	3,319	4,447	3,702	631	7,021	5,077
1957	3,446	5,067	3,615	645	7,061	5,712
1958	3,577	5,747	3,531	657	7,108	6,404
1959	3,710	6,571	3,443	665	7,154	7,236
1960	4,110	7,690	3,340	686	7,450	8,376
1961	4,201	8,743	3,199	707	7,400	9,450
1962	4,291	9,854	3,076	743	7,366	10,597
1963	4,401	11,010	2,953	777	7,354	11,787
1964	4,539	12,481	2,851	823	7,390	13,304
1965	4,705	14,057	2,755	871	7,460	14,928
1966	4,873	15,750	2,644	918	7,517	16,668
1967	5,051	17,762	2,603	981	7,654	18,743
1968	5,251	20,357	2,561	1,041	7,812	21,397
1969(d)	5,428	23,245	2,530	1,114	7,958	24,360
1970	5,607	27,229	2,500	1,212	8,107	28,441
1971	5,873	32,420	2,471	1,329	8,344	33,749
1972	6,143	37,879	2,389	1,442	8,532	39,321
1973	5,856	44,376	2,319	1,551	8,777	45,927
1974	6,536	52,249	2,174	1,580	8,711	53,829
1975	6,588	60,896	2,030	1,602	8,618	62,498

(a) Existing business in Australia. (b) Relates to companies' financial years which ended during the calendar years shown. (c) Includes superannuation business. (d) Prior to 1969 includes business in Papua New Guinea.

PUBLIC FINANCE

Year ended 30 June—	COMMONWEALTH GOVERNMENT				STATE				GOVERNMENT SECURITIES ON ISSUE(a)				
	Consolidated revenue fund		Net loan fund expenditure (b)	Taxation collections	Consolidated revenue fund		Net loan expenditure (b)	Taxation collections	Commonwealth Government	State	Total	Overseas	In Australia
	Revenue	Expenditure			Revenue	Expenditure							
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
1902	23	8	..	18	56	58	19	5	..	429	429	n.a.	n.a.
1912	41	29	2	32	83	82	33	11	12	557	569	388	181
1922	128	128	10	99	170	175	67	36	708	1,039	1,747	823	924
1932	143	143	8	109	199	242	12	65	692	1,800	2,492	1,320	1,172
1942	420	420	426	362	305	299	17	115	1,340	2,038	3,378	1,312	2,066
1948	932	932	26	848	394	398	75	64	3,702	2,119	5,821	1,117	4,704
1949	1,109	1,109	—9	952	452	456	102	73	3,685	2,202	5,887	1,088	4,798
1950	1,161	1,161	85	1,018	521	525	147	83	3,731	2,367	6,098	1,099	4,999
1951	1,684	1,684	101	1,447	613	613	257	103	3,777	2,619	6,396	1,067	5,329
1952	2,034	2,034	63	1,848	777	783	395	126	3,838	2,993	6,830	1,113	5,717
1953	2,080	2,080	71	1,783	876	877	322	142	3,893	3,288	7,181	1,142	6,038
1954	2,046	2,046	83	1,810	941	935	335	161	3,964	3,573	7,537	1,165	6,372
1955	2,135	2,135	66	1,882	991	998	321	179	3,998	3,846	7,844	1,216	6,628
1956	2,277	2,277	88	2,014	1,052	1,082	312	196	4,031	4,121	8,151	1,269	6,882
1957	2,624	2,624	88	2,208	1,154	1,168	317	229	3,957	4,396	8,353	1,216	7,138
1958	2,648	2,648	90	2,338	1,210	1,224	314	256	3,670	4,686	8,356	1,248	7,100
1959	2,592	2,592	132	2,283	1,280	1,295	338	276	3,512	4,988	8,499	1,319	7,186
1960	2,877	2,877	119	2,519	1,399	1,404	357	320	3,334	5,301	8,635	1,389	7,242
1961	3,277	3,277	83	2,871	1,511	1,513	384	335	3,215	5,630	8,845	1,413	7,438
1962	3,283	3,283	182	2,858	1,609	1,617	395	353	3,119	5,963	9,082	1,424	7,655
1963	3,371	3,371	274	2,907	1,694	1,696	405	391	3,121	6,314	9,434	1,522	7,917
1964	3,809	3,809	226	3,247	1,829	1,829	438	448	3,172	6,691	9,863	1,545	8,314
1965	4,418	4,418	167	3,819	1,947	1,965	477	493	3,134	7,091	10,225	1,529	8,697
1966	4,879	4,879	(c)260	4,221	2,094	2,119	492	536	3,145	7,495	10,639	1,505	9,138
1967	5,228	5,228	(c)450	4,492	2,286	2,289	516	594	3,275	7,934	11,209	1,532	9,675
1968	5,760	5,760	(c)655	4,952	2,463	2,468	540	667	3,600	8,317	11,917	1,558	10,358
1969	6,086	6,086	(c)236	5,528	2,689	2,700	574	775	3,682	8,831	12,512	1,698	10,813
1970	6,979	6,979	(c)446	6,380	3,010	3,028	615	870	3,885	9,320	13,205	1,580	11,625
1971	7,838	7,838	(c)439	7,183	3 457	3,483	628	910	3,801	9,691	13,492	1,546	11,946
1972	8,688	8,688	(c)218	7,939	4,035	4,050	896	1,297	3,808	10,227	14,035	1,442	12,592
1973	9,278	9,278	(c)281	8,470	4,675	4,704	973	1,644	3,963	10,781	14.744	1,265	13,479
1974	11,976	11,976	(c)239	10,917	5,481	5,514	868	2,042	4,088	11,219	15,306	1,032	14.274
1975	15,391	15,391	(c)1,785	14,212	7,109	7,187	1,097	2,554	5,956	11,814	17,770	1,182	16,587
1976	19,713	19,713	2,277	16,939	8,724	8,706	1,370	3,124	9,010	11,328	20,338	1,325	19,013

(a) At 30 June. Expressed in Australian currency equivalents at ruling rates of exchange. (b) Loan expenditure on works and services (c) Includes expenditure financed under the United States Defence Credits Arrangements.

SOCIAL

PENSIONS, BENEFITS, ETC.

Year ended 30 June—	Age and invalid pensions (including Wives' Allowances Pensions)			Family allowances(a)		Widow's pensions		Unemployment benefits	
	Pensioners (b)	No. of wives (c)	Amount paid (d)	No. of children (b)	Allowance paid	Pensioners (b)	Amount paid (d)	No. on benefit—weekly average	Amount paid (d)
	'000	'000	$m	'000	$m	'000	$m	'000	$m
1902	..	..	..	..	..	..	..	..	..
1912	90	..	4.3	..	..	..	..	..	..
1922	147	..	10.8	..	..	..	..	..	..
1932	261	..	22.3	..	..	..	..	..	..
1942	341	..	38.5	910	22.6	..	..	..	..
1948	381	12	73.1	1,050	38.9	43	7.8	4	0.7
1949	403	12	83.4	1,105	48.6	43	8.8	2	(f)
1950	414	13	89.1	1,836	(e)60.7	43	8.8	13	2.5
1951	417	12	99.0	2,389	87.2	42	9.7	1	(f)
1952	426	11	119.6	2,518	93.2	41	11.2	2	(f)
1953	451	12	144.8	2,624	(e)106.5	41	12.7	30	9.1
1954	478	12	162.6	2,717	101.5	41	13.2	14	5.0
1955	510	13	176.0	2,789	105.1	42	13.7	4	1.4
1956	535	13	203.3	2,876	(e)120.8	43	15.4	4	1.4
1957	554	13	218.4	2,978	114.1	45	17.7	12	4.2
1958	574	12	243.2	3,074	117.5	47	19.7	24	9.8
1959	598	12	259.1	3,172	(e)135.1	50	21.6	28	11.9
1960	619	13	294.0	3,252	125.1	52	24.3	21	9.0
1961	651	14	315.9	3,340	(e)148.6	55	26.9	22	8.9
1962	691	14	360.5	3,420	132.8	57	30.2	53	25.3
1963	711	15	375.5	3,458	135.4	58	31.4	40	21.3
1964	725	16	399.9	3,631	(e)168.8	62	41.6	26	13.5
1965	736	16	426.6	3,711	172.8	65	47.0	14	6.8
1966	744	17	442.4	3,763	176.4	69	50.0	15	7.8
1967	764	19	481.8	3,835	(e)199.3	73	56.4	21	11.2
1968	797	19	514.0	3,891	187.9	75	61.1	21	11.2
1969	827	20	558.6	3,996	193.3	78	69.1	18	9.3
1970	913	23	642.0	4,079	(e)220.1	87	81.8	13	8.9
1971	942	23	702.3	4,156	198.5	90	90.5	15	10.8
1972	972	24	818.5	4,235	216.6	93	104.6	29	26.0
1973	1,081	41	1,072.4	4,239	(e)253.9	106	140.5	40	46.6
1974	1,184	47	1,372.4	4,261	225.4	115	181.0	34	58.2
1975	1,266	51	1,918.9	4,284	224.9	121	241.4	117	251.7
1976	1,342	59	2,536.4	4,293	(e)265.5	129	325.3	192	513.9

(a) Previously child and student endowment. (b) At 30 June. (c) Wives' allowance commenced on 8 July 1943 and was replaced by wives' pension on 5 October 1972. (d) Includes expenditure on additional pension/benefit for children. (e) Five 12-weekly payments made during the year instead of the normal four. (f) Less than $0.05 million.

SOCIAL—*continued*

PENSIONS, BENEFITS ETC.—*continued*

Year ended 30 June—	*Hospital and nursing home benefits—amount paid*	*Medical benefits—amount paid*	*Pharmaceutical benefits—amount paid*	*Total Australian Government expenditure on pensions, benefits, etc.(a)*	*War pensions*		*Service pensions*	
					No.(b)	*Amount paid*	*No.(b)*	*Amount paid*
	$m	$m	$m	$m	'000	$m	'000	$m
1902	..	..	..	..	..	..	..	..
1912	..	..	..	4.3	..	..	..	..
1922	..	..	..	12.1	225	14.1	..	..
1932	..	..	..	23.0	274	14.9	..	..
1942	..	..	..	61.8	220	15.0	14	1.2
1948	8.9	..	..	137.2	416	32.7	16	2.5
1949	11.8	..	..	161.6	440	37.9	16	2.7
1950	12.6	..	0.1	185.6	471	42.1	16	2.9
1951	13.1	..	5.9	230.0	503	53.1	17	3.0
1952	13.4	2.1	15.4	275.2	525	66.7	17	3.6
1953	14.4	3.5	14.4	331.0	544	72.6	19	4.5
1954	16.7	7.2	18.5	353.1	564	78.1	21	5.4
1955	18.6	13.5	21.5	378.6	584	87.8	22	6.0
1956	19.1	14.6	23.8	429.7	600	91.3	35	8.3
1957	19.6	18.3	23.4	447.8	614	95.6	39	9.8
1958	21.6	20.6	30.1	495.0	629	106 6	42	11.3
1959	29.6	23.2	41.9	556.5	643	109.0	44	12.4
1960	37.2	26.8	48.7	598.7	655	117.5	46	13.5
1961	41.3	28.4	55.8	661.2	662	132 6	50	15.6
1962	44.4	30.6	70.4	730.4	671	135 1	58	19.4
1963	47.3	32.6	76.9	758.6	671	140.7	62	21.7
1964	56.2	34.4	78.8	832.7	669	154.5	65	24.2
1965	58.8	44.6	82.2	890.4	660	153.5	65	25.5
1966	60.7	54.6	91.8	941.6	647	170.5	66	28.2
1967	67.4	58.2	101.3	1,031.1	632	161.7	67	29.1
1968	74.8	62.5	105.1	1,075.0	617	164.4	69	31.8
1969	85.9	66.5	118.4	1,162.3	601	182.8	67	34.1
1970	111.4	76.1	136.7	1,341.8	585	183.5	74	39.9
1971	122.8	115.5	160.3	1,477.2	570	191.4	77	43.7
1972	162.0	160.4	173.3	1,752.3	553	211.1	78	49.2
1973	198.9	191.1	177.6	2,197.4	546	225.0	96	72.3
1974	226.5	198.9	218.3	2,666.2	532	252.2	109	103.6
1975	292.8	243.6	262.3	3,691.0	514	314.1	122	155.2
1976	254.1	86.1	283.8	4,658.7	499	340.1	142	218.9

(*a*) National Welfare Fund items only, including expenditure for all years on pensions, benefits, etc., which subsequently became payable from the National Welfare Fund. In addition to the items shown in the preceding columns, the tables include expenditure on—the rehabilitation service; milk for school children; tuberculosis campaign; sickness, special and funeral benefits and some miscellaneous welfare and health services. Excludes war and service pensions, telephone rental concessions for pensioners and some minor welfare and health services. (*b*) At 30 June.

EDUCATION

POLICE AND PRISONS

Year(a)	*Schools*				*Universities*		*Police*	*Prisons*	*Convicted prisoners*
	Government		*Non-government*						
	Schools	*Pupils*	*Schools*	*Pupils*	*Number*	*Students*			
	'000	'000	'000	'000		'000	'000	No.	'000
1902	7.2	637	2.4	144	4	1.9	5.9	n.a.	4.2
1912	8.4	663	1.9	164	6	3.8	6.6	101	3.4
1922	9.6	837	1.7	202	6	7.8	7.0	92	3.0
1932	10.2	934	1.8	221	6	9.9	8.6	85	4.1
1942	9.0	868	1.8	250	6	10.6	9.7	71	3.5
1949	7.9	971	1.8	293	8	31.1	11.1	71	3.8
1950	7.8	1,027	1.9	310	8	30.0	11.5	70	4.0
1951	7.6	1,078	1.9	326	8	31.1	11.9	70	4.2
1952	7.6	1,145	1.9	348	8	29.1	12.6	69	4.8
1953	7.6	1,206	2.0	366	8	28.3	12.7	70	4.8
1954	7.6	1,275	2.0	388	9	28.9	12.6	71	4.8
1955	7.6	1,337	2.1	410	9	30.3	12.9	72	5.1
1956	7.7	1,357	2.1	432	9	34.0	13.5	73	6.0
1957	7.7	1,427	2.0	453	9	36.6	14.1	73	6.4
1958	7.8	1,498	2.0	474	10	41.5	14.5	73	6.6
1959	7.8	1,560	2.1	492	10	47.2	14.9	74	6.6
1960	7.9	1,613	2.1	511	10	53.4	15.3	77	6.8
1961	7.9	1,662	2.1	527	10	57.7	15.9	75	7.2
1962	7.9	1,711	2.2	540	10	63.3	16.4	74	7.4
1963	7 9	1,754	2.2	553	10	69.1	16.7	73	7.7
1964	7.8	1,799	2.2	565	13	76.2	17.2	74	7.7
1965	7.8	1,855	2.2	580	13	83.3	17.6	74	7.7
1966	7 8	1,919	2.2	583	14	91.3	18.4	76	8.1
1967	7.7	1,991	2.2	595	14	95.4	19.0	75	8.7
1968	7.6	2,055	2.2	601	14	101.5	19.7	79	8.8
1969	7.5	2,114	2.2	603	14	109.7	20.1	74	9.2
1970	7.5	2,160	2.2	608	17	116.8	20.3	77	9.3
1971	7.4	2,197	2.2	611	17	123.8	21.0	79	9.5
1972	7.4	2,229	2.2	612	17	128.7	22.2	80	9.8
1973	7.3	2,241	2.2	613	17	133.1	23.1	85	9.1
1974	7.3	2,258	2.2	618	17	142.9	24.4	90	7.6
1975	7.3	2,298	2.1	621	18	148.3	n.a.	n.a.	n.a.
1976	7.3	2,335	2.1	625	18	154.0	n.a.	n.a.	n.a.

(*a*) Years ended at varying dates for education statistics. Years ended 30 June for Police and Prisons.

DIARY OF PRINCIPAL ECONOMIC EVENTS, 1974-75 AND 1975-76

(Note: The figures shown on pages 500–5 of Chapter 16, National Accounts are published in *Australian National Accounts, National Income and Expenditure, 1974–75* (7.1). Since that chapter was prepared, revisions have been made to some estimates in the course of preparing *Australian National Accounts, National Income and Expenditure, 1975–76.* All references to national accounts estimates in this Diary are to the revised estimates.

Annual movements in price indexes discussed in this chapter refer to movements in simple averages of the monthly or quarterly indexes.)

The principal economic events in earlier years were shown in the following issues.

Years	*Year Book No.*	*Pages*
1931 to 1938	33	968–77
1939 to 1944	36	1129–41
1945 to 1948	37	1235–45
1949 to 1951	39	1331–40
1952 to 1955	42	1149–60
1956 to 1958	46	1185–92
1958–59 to 1961–62	48	1188–1200
1962–63	49	1253–56
1963–64	50	1283–88
1964–65	51	1269–74
1965–66	52	1185–88
1966–67	53	1279–82
1967–68	54	1253–57
1968–69	55	1243–48
1969–70	56	1077–81
1970–71	57	1053–59
1971–72	58	1049–54
1972–73	59	1067–74
1973–74	60	1141–47

In 1974–75 the Australian economy was subjected to a number of events unknown in recent experience. Consumer prices (as measured by the Consumer Price Index) increased by 16.7 per cent; total registered unemployed reached over 5 per cent of the estimated labour force; gross domestic product at constant prices grew by 0.6 per cent.

An overview of 1975–76 is not very different. Consumer prices increased by 13.0 per cent; total registered unemployed remained high, varying between 4.1 per cent and 5.7 per cent of the estimated labour force; gross domestic product at constant prices increased by 1.6 per cent.

High rates of price increases pervaded most areas of the economy in both years. In 1974–75, the food component of the Consumer Price Index increased by 9.7 per cent, while the indexes for the other components increased by between 17.3 per cent and 21.0 per cent. The CPI 'all groups' index increased by 16.7 per cent, compared with a 12.9 per cent increase in 1973–74. In 1975–76 the highest increases in CPI components occurred in the clothing and drapery component (16.2 per cent) and the housing component (18.0 per cent). Increases in the indexes of other components ranged between 9.9 per cent and 12.3 per cent, to give an 'all groups' index increase of 13.0 per cent. The price index of materials used in house building showed increases of 13.5 per cent in 1975–76, 21.2 per cent in 1974–75 and 15.4 per cent in 1973–74. For materials used in building other than house building, the price index increased by 15.1 per cent in 1975–76, 22.9 per cent in 1974–75 and 13.1 per cent in 1973–74. Increases of 9.2 per cent in 1975–76, 7.7 per cent in 1974–75 and 18.3 per cent in 1973–74 were exhibited by the price index of materials used in manufacturing industry.

The overall performance of the economy can be summarised by the growth in gross domestic product at constant prices. This aggregate rose by 1.6 per cent in 1975–76 and by 0.6 per cent in 1974–75, compared with an increase of 5.6 per cent in 1973–74. The non-farm component increased by 1.1 per cent in 1975–76 but fell by 0.1 per cent in 1974–75. Gross farm product, at constant prices, increased by 9.4 per cent in 1974–75, with increases occurring in the production of most farm commodities. However, falling prices resulted in gross farm product at current prices decreasing by 19.1 per cent. In 1975–76, a recovery in meat and wool prices and increased farm production resulted in gross farm product increasing by 2.9 per cent at current prices and 6.4 per cent at constant prices.

The rate of increase in wages, salaries and supplements moderated during 1975–76, increasing by 14.7 per cent, compared with increases of 28.6 per cent in 1974–75 and 23.0 per cent in 1973–74. Average weekly earnings per employed male unit increased in those years by 14.2 per cent, 25.6 per cent and 16.3 per cent respectively. Annual average employment (excluding agriculture and private domestic service) fell by 0.2 per cent in 1975–76, following increases of 0.4 per cent in 1974–75 and 3.9 per cent in 1973–74. Gross operating surplus increased by 17.7 per cent in 1975–76, by 0.7 per cent in 1974–75 and by 16.9 per cent in 1973–74.

At constant prices, gross national expenditure increased by 0.2 per cent in 1975–76, with a strong increase in final consumption expenditure, offset by a significant turn around from stock accumulation in 1974–75 to stock decumulation in 1975–76. In 1974–75 gross national expenditure at constant prices fell by 0.3 per cent. There were significant reductions in private gross fixed capital expenditure and in the rate of stock accumulation, but strong growths in final consumption expenditure (private and government) and in public gross fixed capital expenditure.

Private final consumption expenditure at constant prices increased by 3.1 per cent in 1975–76, by 3.0 per cent in 1974–75, and by 6.1 per cent in 1973–74, with household durables recording the highest level of growth in each of those years. Government final consumption expenditure at constant prices showed the most consistent growth of any expenditure aggregate, increasing by 8.1 per cent in 1975–76, by 6.4 per cent in 1974–75, and by 6.9 per cent in 1973–74. In each of those years increases in expenditure on education and health, welfare and social security were significant. Private gross fixed capital expenditure at constant prices increased by 1.5 per cent in 1975–76 after falling by 10.3 per cent in 1974–75, and increasing by 7.8 per cent in 1973–74. The components of private gross fixed capital expenditure moved in different directions, with expenditure on dwellings increasing by 13.7 per cent in 1975–76 after falling by 23.5 per cent in 1974–75, expenditure on other building and construction falling by 11.0 per cent in 1975–76 and by 1.9 per cent in 1974–75, and expenditure on all other fixed capital increasing by 0.4 per cent in 1975–76 after falling by 5.7 per cent in 1974–75. Public gross fixed capital expenditure fell by 0.8 per cent in 1975–76, after increasing by 14.9 per cent in 1974–75 and by 1.9 per cent in 1973–74.

The large increase in the book value of private non-farm stocks of $2,546 million in 1974–75 occurred primarily in the manufacturing and wholesale and retail trade sectors, and was mainly due to price increases. A large increase in the book value of stocks held by the Australian Wool Corporation more than offset falls in the book value of farm stocks, the increase in book value of farm and miscellaneous stocks being $275 million. After deducting the stock valuation adjustment, private non-farm stocks increased by $567 million and farm and miscellaneous stocks by $204 million. In constant prices, the increases were $380 million and $181 million respectively.

In 1975–76 private non-farm stocks increased in book value by considerably less than in the previous year, increasing by $1,980 million. Small increases in the book value of manufacturing and wholesale trade stocks more than offset a large increase in the book value of retail trade stocks. The book value of farm and miscellaneous stocks increased by $85 million in 1975–76; the book value of stocks held by the Australian Wool Corporation fell, while the book value of wheat stocks rose. However, after deducting the stock valuation adjustment, both private non-farm stocks and farm and miscellaneous stocks fell during 1975–76 by a total of $172 million. At constant prices, the decrease was $121 million.

During 1974–75 the balance of payments position changed from a deficit of $715 million during the first half of the year to a surplus of $251 million in the second half. For the year the deficit was $464 million, compared with a deficit of $435 million in 1973–74 and a surplus of $1,071 million in 1972–73. Exports of goods and services increased by 27.9 per cent (by 7.1 per cent at constant prices) and imports of goods and services by 30.7 per cent (by 1.3 per cent at constant prices), giving a deficit on goods and services of $56 million in 1974–75 compared with a surplus of $124 million in 1973–74. The balance on current transactions resulted in net borrowings from overseas of $731 million in 1974–75, compared with net borrowings from overseas in 1973–74 of $488 million; in 1974–75 net apparent capital inflow (excluding undistributed income) was $267 million, resulting in a rundown of overseas reserves of $464 million.

In 1974–75 exports f.o.b. increased by 26.9 per cent (by 11.3 per cent in 1973–74), with increases in the value of exports of wheat, sugar, coal, iron and steel being offset to some extent by falls in the value of exports of wool, meat and meat preparations. Exports of services increased by 34.0 per cent in 1974–75, compared with a rise of 15.3 per cent in 1973–74, and was attributable mainly to transportation services which rose by 39.3 per cent. Imports f.o.b. increased by 33.1 per cent in 1974–75 (by 51.1 per cent in 1973–74) due to substantial rises in the value of imports of petroleum and associated products, chemicals, machinery and transport equipment, clothing and scientific equipment. Imports of services increased by 23.3 per cent in 1974–75 (by 25.1 per cent in 1973–74) due mainly to increases in transportation services (rising by 24.8 per cent) and overseas travel (up by 25.5 per cent).

The balance of payments was in deficit by $1,010 million during the first half of 1975–76 and by $10 million in the second half of the year, giving a deficit of $1,020 million for 1975–76. Exports of goods and services increased by 9.7 per cent (by 2.2 per cent at constant prices) and imports of goods and services by 4.7 per cent (a fall of 5.1 per cent at constant prices) resulting in a surplus on goods and services of $433 million for 1975–76. The deficit on total current transactions resulted in net borrowings from overseas of $580 million; net apparent capital outflow (excluding undistributed income) was $440 million, resulting in a rundown in overseas reserves of $1,020 million.

In 1975–76 exports f.o.b. increased by 10.7 per cent, reflecting rises in the value of exports of coal, wool, meat, chemicals and metal ores, partly offset by decreases in the value of exports of manufactured goods, machinery and transport equipment, sugar and cereals. Exports of services increased by only 3.9 per cent, although transport services rose by 9.1 per cent. Imports f.o.b. increased by 3.4 per cent, with rises in the value of imports of textiles, electrical machinery, miscellaneous manufactures and petroleum. Imports of services rose by 8.9 per cent.

The volume of money (M3 definition) increased by 15.2 per cent over the year to June 1975, compared with an increase of 14.5 per cent over the year to June 1974. The 1974–75 Commonwealth Government Budget deficit was an important factor contributing to the increase. The level of loans, advances and bills discounted increased in 1974–75 by 10.7 per cent for all trading banks, and by 27.1 per cent for savings banks. Trading banks increased interest rates on deposits and maximum interest rates on overdrafts by about 2 percentage points in July 1974. Similar increases were made to savings bank interest rates on investment accounts and housing loans.

Over the year to June 1976, the volume of money (M3 definition) increased by 13.8 per cent, with the size of the 1975–76 Commonwealth Government Budget deficit being an important contributing factor. A balance of payments deficit provided some offsetting influence. Significant increases in the level of loans, advances and bills discounted occurred during 1975–76, increasing by 12.1 per cent for all trading banks and by 27.5 per cent for savings banks. Trading banks reduced the minimum interest rate payable on short term fixed deposits by 1 percentage point in January 1976, and reduced the maximum interest rate payable on overdrafts by the same magnitude in February 1976. A small increase in the minimum interest rate charged by savings banks on housing loans to individuals occurred in September 1975; savings banks made adjustments to interest rates paid on investment accounts, downwards in February and March 1976, and upwards in June 1976.

Total civilian employment (excluding agriculture and private domestic service) fell by 1.1 per cent between June 1974 and June 1975. Registered unemployment increased dramatically from 78,827 persons in June 1974 (about 1.3 per cent of the estimated labour force) to 245,975 persons in June 1975 (about 4.5 per cent of the estimated labour force), having reached 311,596 persons (about 5.2 per cent of the estimated labour force) in January 1975.

In June 1976 civilian employment was 0.3 per cent lower than in the previous June and registered unemployment stood at 265,251 persons (about 4.4 per cent of the estimated labour force) after 343,939 persons (about 5.7 per cent of the estimated labour force) had been registered as unemployed in January 1976.

The calendar year 1974 saw the highest recorded level of industrial disputation in Australia. There were 2,809 disputes involving 2 million workers losing 6.3 million working days and $128.3 million in wages. The major disputes involved metal, building, transport and meat workers in support of claims for better wages and conditions. In 1973 there had been 2,538 disputes involving 803,000 workers losing 2.6 million working days and $45.2 million in wages. Fewer disputes occurred in 1975, there being 2,432 disputes involving 1.4 million workers with 3.5 million working days and $95.8 million in wages being lost. Claims for wages and conditions were again the major cause of disputation. Strikes also occurred during the political events of November 1975. The level of strike activity was generally lower during the first half of 1976. About a half million working days were lost in June as a result of short strikes against proposed changes to Medibank.

1974–75

July 1974

1 The Broken Hill Proprietary Co. Ltd announced an 8.7 per cent increase in steel prices following Prices Justification Tribunal (PJT) approval.
The Commonwealth Government announced the formation of a Structural Adjustment Board to assist industry to adjust to changing economic conditions and Government policy.

8 The Reserve Bank lowered the Statutory Reserve Deposit (SRD) ratio by 0.6 percentage points to 6.9 per cent. It was further reduced to 6.0 per cent on 11 July, and to 5.5 per cent on 23 July.
Trading banks' basic interest rates on overdrafts of less than $50,000 were increased from 9½ per cent to 11½ per cent, and on fixed deposits from 8 per cent to 10 per cent. Interest rates on savings bank loans and investment accounts increased by the same magnitude.

9 Import licensing controls on certain clothing items were announced.
Special Bonds—Series 2D, issued with interest rates ranging from 9.2 per cent to 9.6 per cent, replaced Series 2C. Net redemptions for the September quarter were $8.6 million.

15 The Commonwealth Government cash and conversion loan was opened, offering two year bonds at 11 per cent, 5 year bonds at 10 per cent and long term bonds at 9.5 per cent. The cash offer raised $144 million (93.5 per cent from the shortest termed bond); the conversion offer raised $32 million.

17 The European Common Market banned all beef imports until November. The ban was extended indefinitely on 23 October.

23 The Treasurer presented a 'mini-budget' with the following provisions: an increase in single pensions of $5 per week, and increases in associated benefits; a rise in duty of 3 cents a nip on spirits and 4 cents on a packet of 20 cigarettes (duty was also increased on other tobacco products); increased charges for telephone connections, rentals and calls and postage; a cut back in the total immigration intake in 1974–75; postponement of the pre-school and child care program; and deferral of the proposed abolition of the means test on age pensions.

29 A strike by ships' engineers, which lasted 20 days and tied up more than 50 ships, was resolved.
The Senate deferred increased postal and telephone charges until the September budget.
The Australian Wheat Board announced the sale of one million tonnes of wheat (valued at about $115 million) to China.

August 1974

5 The PJT recommended a 12 per cent increase in interstate freight rates charged by Mayne Nickless Ltd.

8 The Variable Deposit Requirement relating to overseas borrowings with a maturity of more than 2 years was reduced from 25 per cent to 5 per cent.

9 The N.S.W. Industrial Commission granted four weeks annual leave and a 17½ per cent loading on holiday pay to about one million workers under N.S.W. awards.

12 Ansett and TAA increased passenger fares and freight rates by an average of 12½ per cent.

20 The Arbitration Commission awarded oil industry workers a $25 a week wage increase from 8 August, with a further $5 a week increase from 31 October.
The PJT recommended price increases of between 5.8 cents and 11.6 cents per kilogram for aluminium products produced by Alcoa.

23 The Grants Commission recommended grants for local government areas to upgrade amenities and services, and reduce inequalities between local government areas.

26 The PJT recommended an 8.4 per cent price rise for products produced in the glass division of Australian Consolidated Industries Ltd.

27 The Commonwealth Government announced that a minimum floor price equivalent to 250 cents per kilo clean for 21 micron wool would be guaranteed during the 1974–75 season.
The Tasmanian Treasurer presented the 1974–75 State Budget, providing for a deficit of $1.9 million.

29 The SRD ratio was lowered 0.5 percentage points to 5.0 per cent.
The Commonwealth Government approved price increases for iron ore exported to the Nippon Steel Corporation. The new prices would increase revenue by 28½ per cent in a full year.
The South Australian Premier presented the 1974–75 State Budget, providing for a $12 million deficit.

September 1974

4 The retail price of GMH vehicles and accessories rose by an average of 4.3 per cent following PJT approval. The PJT recommended weighted average wholesale price increases of 4.95 per cent for Ford, and 5.0 per cent for Chrysler.

10 The Commonwealth Government approved a 25 per cent increase in Australian National Line coastal freight rates.

11 The Commonwealth Government announced details of its Regional Employment Development Scheme. Initially $2 million per month would be spent to improve employment opportunities in areas of excessively high unemployment.
The Arbitration Commission granted a $9 a week wage rise to metal workers. Related workers subsequently received a flow on of the increase. The Transport Workers Union was granted wage increases of $15.50 a week from 25 July and a further $9.98 a week from 1 October.

12 The proportion of depositors' balances required to be held by savings banks in prescribed liquid assets and public sector securities was reduced from 60 per cent to 50 per cent.

13 The Organisation of Petroleum Exporting Countries (OPEC) announced a 3.5 per cent average increase in oil export prices for all member nations except Saudi Arabia, to be effective from 1 October.

17 The Budget introduced by the Federal Treasurer provided for an expenditure in 1974–75 of $16,274 million, an increase of $3,980 million or 32.4 per cent. Total receipts were estimated at $15,704 million, the domestic surplus at $23 million and the overall deficit at $570 million. The main proposals of the Budget were: lowering of income tax rates on taxable incomes up to $10,500 with slight increases on incomes greater than that; imposition of a realised capital gains tax and a surcharge on income tax paid on property income (the latter proposal was later amended); changes to deductions for capital expenditure and exploration expenditure in the mining sector; an increase in the private company tax rate to 47½ per cent; the abolition of broadcast listeners' and television viewers' licence fees; an increase in the basic letter postage rate to 10 cents; expenditure on education to be increased by 78 per cent to $1,232 million; health expenditure to be increased by 30 per cent to $1,232 million; 34 per cent increase to $235 million in payments to the States for welfare housing purposes; urban and regional development expenditure to increase 160 per cent to $433 million.
The Victorian State Railways announced a record loss of $73.2 million in the 1973–74 financial year.
The Commonwealth Government announced that known reserves of existing Australian oilfields were 3,300 million barrels, or 15 years supply at the current rate of consumption.

18 Pay rises averaging $14 a week for officers and $15 a week for other ranks in the armed services were announced.

23 Victorian public servants were granted a $15 a week pay rise.

25 The SRD ratio was lowered from 5 per cent to 4 per cent.
The Prime Minister announced a 12 per cent devaluation of the Australian dollar. It would no longer be linked to the United States dollar but an average of foreign currency values weighted in accordance with their trading significance to Australia.
The Treasurer and Premier of Victoria presented the 1974–75 State Budget providing for a $3 million deficit.
The Treasurer of New South Wales introduced the 1974–75 State Budget which provided for a $14 million deficit.
The Queensland Treasurer introduced the 1974–75 State Budget which provided for a deficit of $0.8 million.

October 1974

1 The National Employment and Training (NEAT) scheme came into operation.
Restricted trade practices legislation became operative.

3 The Western Australian Premier and Treasurer introduced the 1974–75 State Budget, providing for a deficit of $9 million.

4 Yields on 13-week Treasury Notes were reduced from 10.75 per cent to 9.36 per cent, and on 26-week notes from 10.76 per cent to 9.47 per cent.

7 Victorian rail freight rates were increased by 22.5 per cent.

10 The SRD ratio was lowered by 1 percentage point to 3 per cent.

11 Loans of $75 million to State Governments for housing were announced.

17 The PJT approved increases of between 1.7 cents and 1.95 cents a gallon in the wholesale prices of petrol, kerosene and heating oil.

18 Import restrictions on most types of footwear, to take effect immediately and remain in force for 12 months, were announced by the Prime Minister.

22 The Reserve Bank made available to the major trading banks a special drawing facility of about $112.5 million to run for 180 days with an option available to the banks to extend it for a further 180 days.

24 The Australian Wheat Board announced the sale of one million tonnes of Australian wheat to Russia for more than $150 million. A similar sale to Egypt was announced on 31 October 1974.

25 The PJT approved the following weighted average wholseale price increases for motor vehicles: GMH—3.16 per cent; Chrysler—3.43 per cent; Toyota—14 per cent.

29 The Treasurer announced amendments to the 10 per cent tax surcharge on capital gains proposed in the budget; assessable incomes below $5,000 would be exempt, with a sliding scale operating in the range $5,000 to $5,500.

31 The Commonwealth Government announced that the Atomic Energy Commission would act as the Government's agent in the mining, treatment and sale of uranium. It would also undertake all new exploration in future beyond that now conducted by companies with exploration licences.

November 1974

1 The Arbitration Commission awarded bank officers a pay increase of $7.44 a week applying from 1 October 1974.

3 New guidelines for foreign investment in the mining industry were released by the Prime Minister.

6 The Flight Crew Officers' Tribunal awarded a pay rise of 27.6 per cent to Qantas pilots, flight engineers and navigators, effective from 1 June 1974.

7 The Australian Industry Development Corporation announced its first local issues of stocks to the public.
The PJT granted Ampol Petroleum a 1.6 cents a gallon increase in the wholesale prices of petrol, kerosene and distillates products.

8 The Ford Motor Company dismissed about 500 workers in Sydney.

10 The Treasurer announced that the variable deposit requirement scheme for overseas borrowings was suspended. The embargo on new overseas borrowings repayable in two years or less was modified to apply only to borrowings of six months or less.
Treasury Note yields were reduced from 9.36 per cent to 8.69 per cent on 13-week notes, and from 9.47 per cent to 8.86 per cent on 26-week notes.

12 The Prime Minister announced new economic policies including: personal income tax cuts effective from 1 January 1975; cuts in private and public company tax from 47.5 per cent to 45.0 per cent; provision to savings banks of an additional $150 million for housing loans; increases in import duties on built up and completely knocked-down motor vehicles; the relaxation of staff ceilings for staff employed under the Public Service Act.

18 Crude oil was removed from PJT jurisdiction.

24 Ansett pilots and management negotiated a 24 per cent pay increase. TAA pilots were subsequently granted an award increase and over award payment providing the same salary increase.

December 1974

1 The home consumption price of wheat increased by $12.30 to $83.40 per tonne.
The price of aluminium ingots produced by Comalco Aluminium (Bell Bay) Limited was increased by 8.9 per cent with PJT approval.
The Commonwealth Government announced details of assistance for workers and families forced to relocate themselves to secure suitable employment.

2 The Public Service Arbitrator granted pay rises ranging from 13.5 per cent to 23 per cent to Australian Public Service third division clerical and administrative staff, postal workers, and fourth division clerical assistants and keyboard employees.
The AMA recommended increases in doctors' fees of 32 per cent, effective from 1 January 1975.
The NSW Transport Commission increased interstate rail fares by between 17 and 22 per cent.

3 The Prime Minister announced the introduction of tariff quotas for 12 months on imported acrylic apparel yarns, knitted or crocheted fabrics of man-made fibres and terry towels.

9 The Treasurer announced the deferment, until 30 June, of company tax payments due on 15 February 1975, and also a scheme of accelerated depreciation.
Treasury Note yields were reduced by approximately 0.7 percentage points, 13-week notes to 7.98 per cent and 26-week notes to 8.18 per cent.

12 Academics' salaries were increased by between 16 and 33.7 per cent, effective from 16 October 1974.

13 The PJT approved price increases of 7.8 per cent (weighted average) for products produced by BHP. A 2.45 per cent increase in prices of cars produced by Ford was announced, and similar increases were subsequently approved for Chrysler and GMH.

16 GMH announced that it would cut its staff by up to 5,000 workers in January 1975.
Comalco Limited announced that it was cutting back primary aluminium production at its smelter at Bell Bay, Tasmania.

17 Legislation to enable the Commonwealth Government to make loans of up to $350 million to the Australian Wool Corporation was assented to.
Liquor Trades employees were granted a $6 a week pay increase.

18 The Arbitration Commission increased the male minimum wage by $8.00 to $76.10 a week. The female rate was adjusted by $7.20 to 90 per cent of the male rate.

19 The PJT approved price increases for Blue Circle Southern Cement Ltd. of $3.57 a tonne for bagged cement and $2.83 a tonne for bulk cement.

20 The Commonwealth Government announced that tariff rates on car parts imported for assembly in Australia would increase to 27.5 per cent in January 1975, and gradually increase to 35 per cent over a four-year period. The quantity imported would also be limited.

23 Partners in the Hail Creek (Queensland) joint venture announced the sale to Japan of 66 million tonnes of coking coal (worth about $2 billion) over 15 years.

25 Darwin was devastated by Cyclone Tracy in Australia's worst ever natural disaster.

30 The Commonwealth Government set up the Darwin Reconstruction Commission to supervise the rebuilding of the city, and decided to give special welfare payments to all victims of the cyclone.

31 The United States Government called for voluntary restraints by foreign beef suppliers to restrict beef import levels to about 560,000 tonnes in 1975. Australia would be restricted to about 280,000 tonnes.

January 1975

1 The new personal income tax rates announced on 12 November became effectivet.

7 The Commonwealth Government approved a scheme to increase subsidies for the employment of apprentices.

10 Treasury Note yields were reduced by approximately 0.2 percentage points to 7.81 per cent on 13-week notes and 8.01 per cent on 26-week notes.
EZ Industries Limited announced a 20 per cent reduction in zinc output from its refinery at Risdon, Tasmania.

14 Rates of duty on imported car and truck tyres were increased.
The Commonwealth Government announced the introduction of tariff quotas on men's shirts, woven pyjamas and other woven nightware.

21 Peko-Wallsend Ltd announced the closure of its smelter at Tennant Creek and the suspension of mining at the Warrego and Peko mines.

22 The Treasurer held separate meetings with the managing directors of GMH, Ford and Chrysler to outline Government plans to assist the industry in return for their undertaking not to dismiss workers.

23 BHP announced that production at its Port Kembla hot strip steel mill would be reduced by 30 per cent from 2 February 1975.
The Treasurer announced the issue in Germany of a public loan of DM100 million ($A32 million).

24 Broken Hill Associated Smelters Proprietary Limited announced that production at their Port Pirie lead smelter would be reduced by 16 per cent on the level achieved in the December half year.

28 The Commonwealth Government sales tax on all new cars from 27½ to 15 per cent for the next three months after which the rates would be restored to their former levels by equal monthly steps of 2½ percentage points, and imposed higher import quotas on passenger and light commercial vehicles. GMH said it would not retrench any employees for at least 90 days; Ford and Chrysler agreed to hold off dismissals for at least 30 days.

29 Extensions of the Regional Employment and Development scheme were announced.
The Commonwealth Government decided not to proceed with the capital gains tax which had been proposed in the September budget.

30 The Arbitration Commission granted a pay rise of $2.88 a week to postal workers.

31 Thiess Peabody Mitsui Coal Proprietary Limited signed a contract to supply Japanese steel mills with 73.9 million tonnes of Bowen Basin (Queensland) coking coal worth about $2 billion over 17 years from 1979. Three new mines would be opened up.

February 1975

1 The sale to China of one million tonnes of wheat worth about $120 million was announced.
The sale of three million tonnes of sugar, worth approximately $1,200 million, to be shipped to Japan over the next 5 years, was announced.
The Commonwealth Government announced that it would buy half of the interests of the Delhi International Oil Corp. in the Cooper Basin oil and gas field in the far north-east of South Australia and one quarter of all its other Australian exploration interests for about $24 million. This was to be the first major direct purchase of Australian energy resources by the Commonwealth Government.

7 The Treasurer announced that the new maximum interest rates applying to public and private borrowings by local and semi-government authorities would be 9.4 per cent for short term, 9.7 per cent for medium term and 9.8 per cent for long term public loans, while the rate on private loans would be 0.1 percentage points higher.

9 The Australian Meat Board announced the sale of 40,000 tonnes of beef worth $20 million to the Soviet Union.

10 Special Bonds series 2D were replaced by series 2E, with interest rates of 9.0 per cent to 9.6 per cent. Net redemptions for the March Quarter were $41.5 million, and $24.4 million for the December quarter.

11 BHP increased its steel prices by a weighted average of 6.03 per cent. The increase brought aggregate rises to 41.7 per cent since January 1973.

13 A Commonwealth Government cash and conversion offer opened with bonds offered carrying yields ranging from 8.5 per cent to 9.5 per cent. The cash offer raised $389 million while the conversion offer raised $209 million.

14 The Prime Minister announced the provision of an additional $240 million to the States to be spent by 30 June, and to be used to create more employment and to retain employees facing retrenchment.

16 Alcoa of Australia Limited announced that they would reduce alumina production at their two refineries near Perth by about 18 per cent.

17 EZ Industries Limited announced a reduction in zinc production of 20 per cent and the suspension of superphosphate production at Risdon, Tasmania. Queensland Alumina Limited, Gladstone, announced that it planned to restrict production for at least the current quarter from an annual rate of 2.4 million tons a year to 2 million tons a year.

18 The Commonwealth Government made available a further $30 million to the States for welfare housing.

19 About 2,000 production and maintenance workers employed by New South Wales breweries accepted a $9 a week wage increase plus an extra $1.50 in shift penalty rates and a 70 cents per week tool allowance for tradesmen.

27 The PJT recommended price increases for the Leyland Mini range of between $74 and $130.

March 1975

1 Caltex announced that the price of petrol would rise by 1.8 cents a gallon following PJT approval. Other oil companies were subsequently granted similar increases.

2 The ANZ Bank announced that interest tates on most advances and deposits below $50,000 would be reduced as follows: the interest rate on overdrafts by 0.5 percentage points; on trading bank housing loans by between 0.25 and 0.5 percentage points; and on interest bearing term deposits by up to 1 percentage point. Most banks followed with similar adjustments.

3 The Arbitration Commission granted a $6 a week pay rise to 30,000 textile workers.

4 The price of Holden cars rose from between $60 and $157, as recommended by the PJT. Further price increases were announced on 7 March to allow for retractor front seat belts and evaporative emission control equipment.
Import quotas on a wide range of clothing were imposed.

4 Recommended pay rises of $5,500 for members of Federal Parliament were accepted by Parliament. Salaries for judges and heads of Government Departments were also increased.

9 The Commonwealth Government imposed temporary import restrictions on hot and cold rolled sheets and plates of non-galvanised iron or steel, retrospective to 1 January. Imports would be limited during 1975 to 25 per cent of the total imported during 1972 and 1973.

11 The Commonwealth Government decided to increase pensions and associated benefits and take a further step in abolishing the means test on age pensions.
The Treasurer announced that arrangements had been completed for the issue in Switzerland of a 60 million Swiss Franc loan (approximately $A18 million).
The Commonwealth Government imposed tariff quotas on domestic refrigerators, washing machines and clothes dryers, to apply for one year from 1 March.

13 The Commonwealth Government announced increases in war and service pensions and improved repatriation benefits.

17 A 2,400 tonne global beef import quota was announced by Japan. Japan announced further quotas of 11,500 tonnes on 27 June 1975 and 20,000 tonnes on 29 August 1975.
The PJT recommended a 3.2 per cent price rise for Ford motor cars. Price increases for GMH and Chrysler followed.

20 A 5 per cent pay rise was granted to bank officers.
About 1,200 second division officers of the Australian Public Service were granted pay rises of between 10 and 12 per cent.

25 A number of building societies in New South Wales reduced interest rates on home loans by 0.75 percentage points.

31 Under a 'voluntary restraint' scheme announced by the United States Government, Australia would be allowed to provide 52 per cent of a ceiling of 1,180 million pounds of beef to be imported by the United States in 1975.

April 1975

1 The N.S.W. Government reduced the maximum deposit rate for N.S.W. Permanent Building Societies from 10 per cent to 9 per cent.
Prices of fully-imported Mazda vehicles rose by up to $377 following a decision by the PJT.

4 Broken Hill Associated Smelters announced that lead output from its Port Pirie smelter in South Australia would be limited to 60 per cent of its capacity.
The Victorian Building Societies Association recommended that building societies cut interest rates by 0.5 percentage points. The majority adopted the new rate from 1 May.

10 The Commonwealth Development Bank reduced interest rates on loans approved since 11 July 1974 generally by 0.5 percentage points, effective from 14 March.

15 The Commonwealth Government approved increases in international air fares and increases ranging from 5 to 8 per cent on Australian routes.

16 The Treasurer announced the placement of two DM50 million ($A32 million) loans in Germany.

21 The AMA recommended that doctors increase their fees by 12.5 per cent from 1 July. The Commonwealth Government commissioned an independent inquiry to determine the fees on which medical benefits would be based. The results of the inquiry, released 30 May, found justification for an increase of 4.2 per cent.

28 Nissan Australia announced an average retail price increase of 4.1 per cent in its Australian assembled Datsun 180B range following PJT approval.

29 The two largest building societies in Victoria reduced interest rates on small deposits.

30 Alcan Australia Limited decided to operate its Kurri Kurri smelter at only 66 per cent capacity.
The Arbitration Commission granted a 3.6 per cent increase in all federal award wages, and increased the minimum wage by $4 per week.

May 1975

6 The PJT granted Ampol Petroleum a 3 cents per gallon increase in petrol prices.

13 The Commonwealth Government announced that it would introduce temporary quotas on imports of tufted and axminster carpet should imports exceed specific "trigger" levels, and revise rates of duty on imports of textile and apparel and papermaking and printing machinery.

15 A Commonwealth Government cash and conversion offer opened, with bonds offered carrying interest rates ranging from 8.5 per cent to 9.5 per cent. The cash loan raised $45 million, the conversion offer $338 million. Net subscriptions to special bonds for the June quarter were $3.2 million.

20 The PJT recommended price increases for Ford cars of 4.5 per cent across-the-board and between $61 and $187 for Chrysler cars. GMH was granted similar price increases on 2 June 1975.

22 The Federal Government made a submission to the Prices Justification Tribunal supporting BHP's application for a steel price increase.

27 The Commonwealth Government announced that the 250 cents per kilo wool floor price for 1974–75 would be extended to the 1975–76 season.

28 The PJT recommended price increases for Volkswagen motor vehicles of between 4.3 per cent and 6.9 per cent, and of $175 to $610 for Renault and Peugeot vehicles.

June 1975

11 The Victorian Master Builders' Association discontinued a weekly $26 over award payment to about 12,000 metropolitan plumbers and builders' labourers. The employees were subsequently laid off. On 12 August the payment was reinstated, and the industry reopened.

13 A Federal Arbitration Commissioner adjusted wage rates to give full equal pay to 60,000 women in the clothing industry.
The Treasurer announced the placement of a US$100 million public bond issue in the United States.

19 At the Premiers' Conference, the Prime Minister undertook to introduce legislation to increase the financial assistance grants otherwise payable in 1975–76 by $220 million, and for the amount to be built into the base for calculating the grants in subsequent years; to add $5 million to the base amount on which Western Australia's financial assistance grant for 1975–76 and subsequent years will be calculated; and to provide for an increase in the 'betterment' factor from the present 1.8 per cent to 3.0 per cent for calculating the grants for 1976–77 and subsequent years.

24 The High Court of Australia declared the Petroleum and Minerals Authority invalid.

27 The minimum award wage for storemen and packers was increased by $13.30 to $112 a week, with employees only receiving an increase in their 'paid rates' sufficient to bring their wage up to the new minimum award.

30 The Commonwealth Government announced that a temporary import restraint would apply from 1 July 1975 to 30 June 1976 on imports of certain garments from China.

1975–76

July 1975

1 The Medibank health insurance scheme came into effect.
The Commonwealth Government announced that quotas on the export of tin from Australia had been extended until 30 September 1975.

3 BHP announced deferral of all capital expenditure, cancellation of consumer durable orders, sharp reductions in overtime and restrictions on all outside contracting services at steel works.

4 The Treasury Note yield on 13-week notes was reduced from 7.81 per cent to 7.31 per cent, and on 26-week notes from 8.01 per cent to 7.60 per cent.
The Reserve Bank announced that the SRD ratio would rise by 1.0 percentage point on 16 July 1975, a further 1.0 percentage point on 5 August 1975, but would be reduced by 0.4 percentage points on 17 July 1975 to replenish the major trading banks' Term and Farm Development Loan Funds. Banks would also prepay loans amounting to 112.5 million made available under a special drawing facility due to expire on 18 October.

5 The Commonwealth Government announced that Japan had agreed to increase long-term purchases of Australian coking coal from approximately 27–29 million tonnes in the current year to 44–49 million tonnes per year by 1980.

14 The Arbitration Commission granted a $9.30 a week pay rise to workers at GMH. By 29 July 1975 the Commission had awarded the increase to vehicle builders at all the other manufacturing companies. GMH indicated it would seek substantial increases in vehicle prices.
The South Australian Government announced abandonment of the proposed Redcliffe petrochemical project in South Australia because of rising costs.

17 The Treasurer announced increases in the maximum interest rates for borrowing by local and semi-government authorities; the new rates for public issues would be 10.4 per cent for long term, 10.2 per cent for medium term and 9.7 per cent for short term loans. Private issues would carry the usual margin of 0.1 percentage points above these rates.

21 The Prime Minister announced that the growth of the Australian Public Service and statutory authorities would be limited to 1.5 per cent for the financial year 1975–76 in line with restraints on Government spending.

22 The Coal Industry Tribunal ruled that for the ensuing 3 months miners could be dismissed without severance pay if their industrial action caused closure of a mine.
The Australian Wheat Board announced the sale to the Soviet Union of 750,000 tonnes of wheat worth about $100 million.

24 The Commonwealth Government announced that import licensing would apply to imports of certain garments from Singapore, the Philippines and Thailand.

25 The Queensland Government announced power restrictions for the south-eastern area of the State and northern New South Wales, because coal stocks had been run down due to industrial action.

27 Domestic air fares charged by TAA and Ansett rose by an average 10 per cent. It was announced that cargo rates would rise by 10 per cent on 2 August.

28 The Australian National Line increased passenger fares and accompanied vehicle rates by 30 per cent. Coastal general cargo freight rates for ANL would increase by 40 per cent from 1 August 1975 (this increase is not to apply to northbound general cargo from Tasmania to the mainland, except for bulk commodities and paper).

30 The PJT approved a 10.5 per cent increase in steel prices charged by BHP.

August 1975

3 Treasury Note yields were reduced by approximately 0.1 percentage points, 13-week notes to 7.19 per cent and 26-week notes to 7.47 per cent.

8 Special Bonds Series 2E were replaced by Series 2F, with interest rates of 9.2 per cent and 10.0 per cent. Net subscriptions for the September quarter amounted to $24.8 million.

11 The Commonwealth Government announced an additional Canadian import quota entitlement of 8,200 tonnes for Australian beef and veal. The import entitlement was to apply from 12 August to 31 December 1975

14 A Commonwealth Government cash and conversion loan opened, offering securities with interest rates ranging from 8.3 per cent to 10 per cent. The cash offer raised $682 million, the conversion offer $352 million.

18 Maintenance work was halted at the Australian Oil Refinery at Kurnell, where work bans supporting claims for a $35 a week pay rise were imposed by members of four unions.

19 The Treasurer presented the 1975–76 Commonwealth Government Budget. The main features were: an increase in outlays of $4,084 million or 23 per cent (including $1,437 million for the introduction of Medibank) compared with an increase of $5,601 million or 46 per cent in 1974–75; an increase of $3,852 million or 25 per cent in receipts compared with an increase of $3,702 million or 31 per cent in 1974–75; a deficit of $2,798 million, $231 million above the actual 1974–75 Budget deficit; a major restructuring of the personal taxation system including the introduction of a system of rebates to replace most deductions; a reduction in the general rate of company tax by 2.5 per cent; increases in duty on beer, potable spirits and tobacco; and the introduction of a levy on the production of crude oil and an export duty on coal.

21 Women employed in private banks were granted equal pay for performing the same duties as male officers.

26 Miners at Blackwater in central Queensland began an indefinite strike, cutting coal shipments to Swanbank.

27 New power restrictions put Queensland industry on a 3-day week.

28 The Premier and Treasurer of South Australia presented the 1975–76 State Budget, providing for the budget to be in balance, compared with a surplus of $8.4 million in 1974–75.

September 1975

1 The Australian Postal Commission introduced higher postal charges designed to meet the cost of the service.
The Australian Telecommunications Commission introduced new charges for telephone, telegram and telex services.

3 The Commonwealth Government announced that Australia will be allowed to export an additional 10,600 tonnes of meat to the United States in 1975.

4 Power restrictions in the south-eastern area of Queensland and northern New South Wales ended when striking miners resumed loading coal for Swanbank.
The Tasmanian Treasurer presented the State Budget, with an estimated deficit of $4.9 million compared with an actual deficit of $13.6 million in 1974–75.

5 The major oil companies rejected a $35 per week pay claim. Caltex later stood down and subsequently reinstated 108 workers at its Kurnell refinery. The Arbitration Commission granted refinery workers a $2.50 a week pay rise on 17 October 1975, to apply from 8 August 1975.

8 The Nippon Steel Corporation announced that Japanese steel mills would cut imports of iron ore by 10 per cent next year.
The Queensland Government set new maximum rates to be observed by all permanent building societies in that State. The investment rate was lowered to 9.25 per cent, and the maximum home loan interest rate to 11 per cent. Building societies in New South Wales and Victoria subsequently reduced some interest rates.

10 The Victorian Premier introduced the 1975–76 State Budget which is expected to be in balance as in 1974–75.

15 Queensland coal miners were granted an average wage increase of $11.80 a week and a 17.5 per cent loading on holiday pay conditional on the miners lifting all bans and limitations by 22 September 1975.

16 Papua New Guinea became an independent nation.
The SRD ratio was increased from 4.6 per cent to 5.6 per cent.

18 The Arbitration Commission granted an increase of 3.5 per cent (the June quarter increase in the CPI) in Federal awards and an increase of $2.80 in the minimum wage.
Oil from newly discovered fields would now draw the same price at the nearest refinery port as the landed cost of imported crude oil.

23 The AMA proposed a 14 per cent rise in doctors' fees from 1 January 1976, and the Commonwealth Government commissioned an independent inquiry to determine the fee levels for Medibank benefits. The inquiry approved a 15.6 per cent increase.

24 The Prime Minister announced new guidelines for foreign investment in Australia.

25 The Arbitration Commission recommended that indexed pay rises for metal trades workers be based on their actual pay rates including over-award payments.
The Treasurer announced that certain low grade steaming coal would be exempted from the newly established coal export duty.
The Queensland Treasurer presented the State 1975–76 Budget, which provided for a $5.6 million deficit compared with a deficit of $8.3 million in 1974–75.

28 The OPEC increased the price of crude oil by 10 per cent to $US11.51 per barrel. The new price would remain in force until June 1976.

October 1975

1 The 1975–76 NSW Budget was presented by the Premier. The deficit is expected to fall from $40.5 million in 1974–75 to an estimated $0.6 million in 1975–76.

2 The Premier of Western Australia presented the State's Budget which estimated to be in balance compared with an actual deficit of $9.1 million in 1974–75.

7 BHP raised the price of steel by 8.75 per cent following PJT approval.

10 The Australian Wheat Board announced the sale of 1 million tonnes of wheat to Egypt and the sale of a further 0.5 million tonnes to the USSR. The combined proceeds of the sale will be about $200 million.

15 The Opposition in the Senate moved to defer the Loan Bill 1975.
A Commonwealth Government cash and conversion loan opened, offering securities carrying interest rates ranging from 8.5 per cent to 10.0 per cent. The loan subsequently raised $358 million and the conversion offer $281 million.

16 The Opposition in the Senate moved to defer Appropriation Bill (No. 1) 1975–76 and Appropriation Bill (No. 2) 1975–76.

21 The Commonwealth Government announced that the 1973 International Sugar Agreement had been extended for a further year.

November 1975

1 Freight increases of 17.5 per cent were imposed on liner freight exports to Japan.

3 The Arbitration Commission decided to carry forward the 0.8 per cent increase in the Consumer Price Index during the September quarter, and consider it together with the December quarter increase.

5 The SRD ratio was increased by 1 percentage point to 6.6 per cent.

7 The International Bauxite Association agreed to recommend a minimum pricing policy for aluminium ore exported by IBA members in 1976.

11 The Hon. J. M. Fraser was appointed Prime Minister in a care-taker capacity by the Governor-General until a general election could be held.

19 The Intergovernmental Committees of Copper Exporting Countries admitted Australia as an associate member.

December 1975

1 International air fares and cargo rates into and out of Australia rose by 3 per cent.
The PJT approved price increases of 2.16 per cent on Ford passenger vehicles and 3.13 per cent on GMH's range of Bedford and Chevrolet trucks. GMH increased prices of passenger and commercial vehicles by 1.5 per cent on 30 December 1975.

13 National elections for both the House of Representatives and the Senate were held. The Liberal and National Country Parties were elected to Government with majorities in both Houses of Parliament.

15 A finance company subsidiary owned jointly by the Commonwealth Savings Bank and the Commonwealth Trading Bank opened for business.

16 Australia participated in the 27 nation Conference on International Economic Co-operation held in Paris to initiate dialogue between developed and developing countries.

17 The Treasurer announced that from 1 January 1976, exchange control would apply between Australia and Papua New Guinea.
The Full High Court of Australia ruled that the Commonwealth had sovereign rights over the Australian territorial sea and continental shelf.

22 The Treasurer released details of a new investment allowance applying generally to new plant and equipment ordered between 1 January 1976 and 1 July 1978, where the cost of an individual item exceeds $1,000. The minimum cost was later reduced to $500, with a sliding scale applying between $500 and $1,000.

23 The Treasurer announced policy measures including a freeze on new expenditure apart from policy speech proposals; the introduction of a staff ceiling on employment under the Public Service Act equivalent to the end-November 1975 level of employment; and the temporary suspension of quarterly instalments of company tax.

January 1976

1 The Foreign Takeover Act 1975 came into force.
New pay-as-you-earn tax instalment deductions, based on the system of personal income tax announced in the 1975–76 Budget, came into operation.

14 The Commonwealth Government announced the introduction of a new system of valuing imports for customs duty purposes based on the Brussels Definition of Value.
The Commonwealth Government announced interim allocations of quotas on items of apparel, footwear, motor vehicles and certain iron and steel sheets and plates, pending final consideration by the Government.

16 The SRD ratio was increased from 6.6 per cent to 7.6 per cent.

19 The Commonwealth Government confirmed that it would support the wool industry for the balance of the 1975–76 selling season at 250 cents a kilogram for 21 micron wool on a clean basis, and stated that price support in the 1976–77 wool selling season would not be below the 250 cents level.

20 The Prime Minister announced the formation of the Economic Consultative Group, comprising 17 leading business and trade union representatives.

22 The Treasurer and the Reserve Bank announced a reduction in maximum bank lending rates from 11.5 per cent to 10.5 per cent; an increase from $50,000 to $100,000 in the size of overdrafts to which the maximum lending rate applies; a temporary increase in the agreed minimum LGS ratio from 18 per cent to 23 per cent; the opening of a Commonwealth Government cash and conversion loan on 29 January offering stocks with yields ranging from 8.5 per cent to 10.2 per cent (a total of $772 million was raised); the introduction of the Australian Savings Bond to replace Special Bonds, with a fixed interest rate of 10.5 per cent ($757 million was raised); and a reduction of about 0.2 percentage points in yields on Treasury Notes.

27 The Commonwealth and A.N.Z. Trading Banks announced reductions of 0.75 percentage points in their interest rates on term deposits of less than $50,000. The Bank of New South Wales made similar reductions on 13 February.

29 The Australian Wheat Board announced the sale of 700,000 tonnes of wheat to China and 600,000 tonnes to India, at a total value of about $150 million.

30 Restrictions were removed on the freedom of Australian residents to own, buy or sell gold in Australia.

February 1976

1 Inter-capital city rail fares were increased by 25 per cent.
The Commonwealth Government announced its intention to allow private development of Australia's uranium resources.

3 The Prime Minister announced further reductions in planned expenditure for 1975–76 of $300 million.

9 The Prime Minister announced new staff ceilings for the Australian Public Service, estimated to reduce expenditure by $20 million in 1975–76.

10 The Commonwealth Government announced the suspension of the meat export levy from 1 March 1976; the reintroduction of the super-phosphate bounty on orders dated on or after 11 February until 30 June 1977 (subsequently amended to be payable on sales rather than orders); and the extension of the existing Dried Vine Fruit stabilisation scheme for 1976.

11 Series 1 Australian Savings Bonds were replaced by Series 2 Bonds with an interest rate 1 percentage point lower at 9.5 per cent.

12 Extensive floods occurred in northern N.S.W. and southern Queensland causing heavy loss of crops and livestock.
The Commonwealth Government announced that legislation covering a new superannuation scheme for Commonwealth employees would come into effect on 1 July 1976.

13 The Arbitration Commission granted an increase of 6.4 per cent (the increase in the Consumer Price Index for the September and December quarters 1975) to Federal award wages and salaries.

25 The PJT granted Ford an interim 2 per cent average price rise for its full range of cars and trucks.

March 1976

1 The maximum interest rate payable on deposits by permanent building societies in N.S.W. was increased from 8.5 per cent to 9.0 per cent.
Air fares between Australia and New Zealand rose by between 7 and 10 per cent.

3 GMH announced that it would spend $17 million on the construction of a plant to manufacture 4 cylinder engines.
Wool auctions which were to be held in Sydney, Melbourne and Canberra on 3 and 4 March 1976, were cancelled because of a wool handling dispute. Storemen and packers returned to work on 21 April 1976, and wool sales resumed on 4 May 1976.
An agreement was signed for the issue of a DM100 ($A31 million) loan in Germany.

15 The interest rate payable on deposits by Queensland permanent building societies was increased from 8.75 per cent to 9 per cent. The maximum rate on loans by societies was increased from 10.75 per cent to 11 per cent.

17 The Queensland Government suspended the trading operations of five permanent building societies in that State. These building societies were amalgamated on 14 April 1976.

18 The Treasurer announced a public bond issue in Switzerland for an amount of 100 million Swiss Francs (approximately $A31 million).

19 The International Tin Council announced increases in the floor price and export quota for tin. The Commonwealth Government announced repatriation pensions increases of between $1.80 and $4.75 a week, and increases in aged pensions of $2.50 a week in the single rate, and $4.00 a week in the married rate.

25 The Arbitration Commission awarded an increase in the minimum wage of $5.00 per week for employees under Federal awards.

30 Australia's beef import allocation to the U.S.A. was raised to 287,000 tonnes for 1976.

The Commonwealth Government announced liberalisation of conditions for importing vehicles and vehicle parts.

31 The Commonwealth Government announced that the Interim Agreement between Australia and New Zealand guaranteeing tariff preferences would be extended for one year to expire on 31 March 1977.
The Commonwealth Government announced a new Home Savings Grants Scheme.

April 1976

1 The price of petrol fell 2.1 cents per litre in metropolitan N.S.W. following removal of the State petrol tax.

5 Australian Savings Bonds Series 2 were replaced by Series 3, with an interest rate to maturity of 9.2 per cent, 0.3 percentage points less than on Series 2 Bonds. Net raisings by Series 2 Bonds amounted to $274 million.

8 A Commonwealth Government cash and conversion offer opened, with securities offered carrying yields ranging from 8.5 per cent to 10.2 per cent. The cash loan raised $296 million and the conversion offer $234 million.

12 The Treasurer announced that the quota available to Australia in the International Monetary Fund would increase by $116 million to $734 million as from the effective date of amendments of the IMF's Articles of Agreement.
The maximum interest rate payable on deposits with permanent building societies in Queensland was increased to 9.5 per cent, and that chargeable on loans was raised to 11.75 per cent (with no maximum on loans over $50,000).

13 The Queensland Parliament passed legislation to increase substantially the financial backing of building societies; regulate their lending activities and the duties of directors; provide for the sale of mortgages in certain circumstances; and provide for the establishment of a contingency fund.

14 The SRD ratio was reduced from 7.6 per cent to 6.6 per cent with a further reduction to 5.6 per cent to occur on 28 April 1976.
Following PJT approval, the weighted average price of Ford cars increased by 1.72 per cent. Chrysler and GMH were subsequently granted similar increases.
With PJT approval, BP's petrol prices increased by 0.28 cents a litre.
A double taxation agreement between Australia and France was signed.

22 Domestic air fares increased by 3 per cent.

27 The Japanese Government announced that its beef import quota for six months from April to September 1976 would be set at 45,000 tonnes.

28 The Australian Wheat Board announced a wheat sale to Russia worth $130 million.

29 The West Australian Industrial Commission granted workers under State industrial awards a 3.0 per cent pay increase to compensate for the March quarter increase in the Consumer Price Index.

May 1976

1 Alcoa Australia Ltd increased the prices for aluminium ingot and semi-fabricated products by an average 4.3 per cent.

11 The Commonwealth Government announced the underwriting, for the 1975–76 season, of the equalisation value for skim milk powder and the provision of additional funds for the Dairy Adjustment Program.

14 The Commonwealth Government announced restrictions on the issue of new dairy licences and relaxation of 'off-season' quota obligations in various States.

15 The Treasurer announced the completion of a bond issue of 100 million Netherlands guilders ($A30 million).

20 The Treasurer announced the introduction of personal income tax indexation from 1 July 1976; changes to Medibank to apply from 1 October 1976; abolition of present taxation rebates for children and their replacement by a new system of family allowances.
The Commonwealth Government announced extension of the Rural Reconstruction Scheme until December 1976; liberalisation and extension of the Fruitgrowing Reconstruction Scheme; an allocation of $13.5 million in 1976–77 for dairy industry reconstruction.

21 The Commonwealth Government announced completion of a $US200 million bond issue in the U.S.A.

28 The Arbitration Commission awarded an increase of 3.0 per cent (the increase in the Consumer Price Index for the March quarter) in Federal award wages and determinations up to and including $125 per week; above $125 a flat $3.80 per week increase was to be applied.

June 1976

9 The Commonwealth Government announced increases in some tariff quotas on textiles and clothing.
The Commonwealth Government announced the introduction of a freight equalisation scheme for Tasmania.
The Commonwealth Government announced its approval of applications by the Toyota and Nissan motor companies for entry into the 85 per cent local content plan for production of passenger motor vehicles following satisfactory proposals by the two companies to use locally produced four cylinder engines.

10 At the Premiers' Conference and Loan Council meeting it was estimated that there would be a 16.4 per cent increase, in 1976-77, in funds available to the States and local authorities from tax sharing entitlements, Loan Council programs and welfare housing advances.

14 The Prime Minister announced that the ceiling for staff, for 30 June 1977, would be reduced by 1.6 per cent for staff employed under the Public Service Act, and by 0.9 per cent for staff employed by other statutory authorities.

16 The Reserve Bank announced a reduction in the SRD ratio of 0.6 percentage points to 5.0 per cent to replenish the trading banks' Term and Farm Development Loan Funds. Together with other measures, the fund would be replenished by $159 million.

17 Australia and Japan signed the Basic Treaty of Friendship and Cooperation.
The Queensland Government increased its coal export ceiling by 150 million tonnes to 450 million tonnes.
The Commonwealth Government announced a reduction in most rates of tariffs on imports from developing countries, effective 1 July 1976.

23 The Australian Meat Board announced the introduction of a minimum price scheme for beef exports to Canada and Sweden.

30 Twenty-four hour stoppages occurred in Victoria in protest against proposed changes to Medibank.

APPENDIX

Some recent information which has come to hand since the various chapters were sent to press is given in summarised form in the following pages, but for later statistics on the subjects dealt with in chapters reference should in general be made to other publications issued by this Bureau, e.g. the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the various mimeographed statements issued on particular subjects.

CHAPTER 3. GENERAL GOVERNMENT

Parliamentary government

STATE GOVERNORS, page 79

Sir Douglas Ralph Nicholls, O.B.E., was appointed Governor of South Australia on 1 December 1976.

SECOND FRASER MINISTRY—AT 25 MARCH 1977, page 83

(The State in which each Minister's electorate is situated and party affiliation are shown in parentheses. Party affiliation is indicated by the use of the following abbreviations: L.P. Liberal Party of Australia; N.C.P. National Country Party of Australia).

* *Prime Minister—*
The Rt Hon. J. M. Fraser, C.H., M.P. (Vic.) (L.P.)

* *Deputy Prime Minister, Minister for National Resources and Minister for Overseas Trade—*
The Rt Hon. J. D. Anthony, M.P. (N.S.W.) (N.C.P.)

* *Treasurer—*
The Rt Hon. P. R. Lynch, M.P. (Vic.) (L.P.)

* *Minister for Primary Industry and Leader of the House—*
The Rt Hon. I. McC. Sinclair, M.P. (N.S.W.) (N.C.P.)

* *Minister for Administrative Services, Vice-President of the Executive Council and Leader of the Government in the Senate—*
Senator the Hon. R. G. Withers (W.A.) (L.P.)

* *Minister for Industry and Commerce—*
Senator the Hon. R. C. Cotton (N.S.W.) (L.P.)

* *Minister for Employment and Industrial Relations and Minister Assisting the Prime Minister in Public Service Matters—*
The Hon. A. A. Street, M.P. (Vic.) (L.P.)

* *Minister for Transport—*
The Hon. P. J. Nixon, M.P. (Vic.) (N.C.P.)

* *Minister for Education and Minister Assisting the Prime Minister in Federal Affairs—*
Senator the Hon. J. L. Carrick (N.S.W.) (L.P.)

* *Minister for Foreign Affairs—*
The Hon. A. S. Peacock, M.P. (Vic.) (L.P.)

* *Minister for Defence—*
The Hon. D. J. Killen, M.P. (Qld) (L.P.)

* *Minister for Social Security—*
Senator the Hon. Margaret G. C. Guilfoyle (Vic.) (L.P.)

Attorney-General—
The Hon. R. J. Ellicott, Q.C. M.P. (N.S.W.) (L.P.)

Minister for Business and Consumer Affairs—
The Hon. J. W. Howard, M.P. (N.S.W.) (L.P.)

Minister for Health—
The Hon. R. J. D. Hunt, M.P. (N.S.W.) (N.C.P.)

* Minister in the Cabinet.

Minister for Immigration and Ethnic Affairs—
THE HON. M. J. R. MACKELLAR, M.P. (N.S.W.) (L.P.)

Minister for Aboriginal Affairs and Minister Assisting the Treasurer
THE HON. R. I. VINER, M.P. (W.A.) (L.P.)

Minister for the Northern Territory and Minister Assisting the Minister for National Resources—
THE HON A. E. ADERMANN, M.P. (Qld) (N.C.P.)

Minister for Post and Telecommunications and Minister Assisting the Treasurer—
THE HON. E. L. ROBINSON, M.P. (Qld) (L.P.)

Minister for Construction and Minister Assisting the Minister for Defence—
THE HON. J. E. MCLEAY, M.P. (S.A.) (L.P.)

Minister for Environment, Housing and Community Development—
THE HON. K. E. NEWMAN, M.P. (Tas.) (L.P.)

Minister for Science—
SENATOR THE HON. J. J. WEBSTER (Vic.) (N.C.P.)

Minister for the Capital Territory and Minister Assisting the Prime Minister in the Arts—
THE HON. A. A. STALEY, M.P. (Vic.) (L.P.)

Minister for Veterans' Affairs—
SENATOR THE HON. P. D. DURACK (W.A.) (L.P.)

Minister for Productivity, Minister Assisting the Prime Minister in Women's Affairs and Minister Assisting the Minister for Employment and Industrial Relations—
THE HON. I. M. MACPHEE (Vic.) (L.P.)

THE SENATE, page 89

Consequent on the death of Senator the Honourable I. J. Greenwood Q.C. (L.P.) Victoria, Mr H. W. R. Lewis was appointed to fill the casual vacancy.

THE HOUSE OF REPRESENTATIVES, page 90

The Honourable D. L. Chipp, M.P., Victoria resigned from the Liberal Party on 24 March 1977.

CHAPTER 7. POPULATION

The census

The following Tables present final statistics of the population of the six States and two mainland Territories of Australia as recorded at the Census of Population and Housing on 30 June 1976 after adjustment for under-enumeration as measured by a post-enumeration survey. The adjusted population totals are a better estimate of the actual population of Australia as at 30 June 1976 than the previously released as recorded figure. Corresponding Census statistics for 1971, similarly adjusted, are also shown.

Post-enumeration surveys were conducted after both the 1976 and 1971 Censuses, by specially trained interviewers. Net under-enumeration was derived by comparing results from the Census and the post-enumeration survey for the same individuals, and indentifying omissions and duplications in the Census.

While every effort is made to minimise under-enumeration in all field collections, including the Census, some inevitably remains for various reasons (e.g. inadvertant omission of very young children, treatment by the collector of an occupied dwelling as unoccupied). Refusal by householders to complete the Census Schedule is not a significant cause of under-enumeration, as estimates by the collector are used in such cases. These and similar problems are common to all population censuses, and although under-enumeration has increased in Australia since the 1971 Census, it is of a similar order to that experienced by comparable countries. For example, the percentage adjustment for underenumeration at the 1970 Census of the United States, was measured at 2.5 per cent.

The 1976 post-enumeration survey was based on a sample size of 2/3 per cent of households, compared with 1/4 per cent for 1971. The sample size was increased to provide more reliable data on the characteristics (e.g. sex, age, marital status) of omitted persons.

Persons living in non-private dwellings (e.g. hotels, motels, hospitals) and sparsely settled areas were excluded from both the 1971 and 1976 post-enumeartion surveys because of operational difficulties in conducting follow-up interviews. However, these amount only to about 5 per cent of the population, and hence any under-enumeration of them is unlikely to have a significant effect on the overall level of under-enumeration.

Since the estimates of under-enumeration are based on a sample of households, they may differ from the figures which would have been obtained had the post-enumeration survey included all households. One measure of the likely difference between the adjusted estimates given in this bulletin and those which would have been obtained had the post-enumeration survey been conducted over all households is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample was enumerated.

The standard errors associated with the adjusted population statistics, expressed as a proportion of the total adjusted population, are given in Tables 1 and 2. There are about two chances in three that the adjusted population estimates will differ by less than one standard error from the figure that would have been obtained had the post-enumeration survey been conducted over all households, and nineteen chances in twenty that the difference will be less than two standard errors.

POPULATION ADJUSTED FOR UNDER-ENUMERATION: STATES, TERRITORIES AND AUSTRALIA, CENSUS 30 JUNE 1971

	Population				
State or Territory	*Census (as recorded) '000*	*Percentage adjustment for under-enumeration*	*Adjusted estimate '000*	*Standard error*	*Standard error as percent of adjusted population*
New South Wales	4,601.2	1.481	4,669.3	9,200	0.196
Victoria	3,502.4	1.069	3,539.8	3,600	0.101
Queensland	1,827.1	1.696	1,858.1	2,000	0.105
South Australia	1,173.7	1.015	1,185.6	2,100	0.175
Western Australia	1,030.5	1.438	1,045.3	5,100	0.491
Tasmania	390.4	0.363	391.8	420	0.108
Northern Territory	86.4	(*a*)	(*a*)	(*a*)	(*a*)
Australian Capital Territory	144.1	(*a*)	(*a*)	(*a*)	(*a*)
Australia	**12,755.6**	**1.350**	**12,927.8**	**13,000**	**0.100**

POPULATION ADJUSTED FOR UNDER-ENUMERATION: STATES, TERRITORIES AND AUSTRALIA, CENSUS 30 JUNE 1976

	Population				
State or Territory	*census (as recorded) '000*	*Percentage adjustment for under-enumeration*	*Adjusted estimate '000*	*standard error*	*Standard error as percent of adjusted population*
New South Wales	4,777.1	2.871	4,914.3	3,500	0.071
Victoria	3,647.0	2.715	3,746.0	3,500	0.092
Queensland	2,037.2	3.659	2,111.7	1,800	0.085
South Australia	1,244.8	1.350	1,261.6	700	0.056
Western Australia	1,144.9	2.183	1,169.8	1,000	0.085
Tasmania	402.9	1.116	407.4	320	0.077
Northern Territory	97.1	4.424	101.4	450	0.444
Australian Capital Territory	197.6	2.898	203.3	650	0.320
Australia	**13,548.5**	**2.709**	**13,915.5**	**5,100**	**0.037**

POPULATION: AVERAGE ANNUAL RATE OF INCREASE: 1971-1976

	Average annual rate of increase between 1971 and 1976 Censuses based on:	
State or Territory	*Population (as recorded)*	*Population adjusted for under-enumeration*
New South Wales	0.75	1.03
Victoria	0.81	1.14
Queensland	2.20	2.59
South Australia	1.18	1.25
Western Australia	2.13	2.28
Tasmania	0.63	0.78
Northern Territory	2.36	(*a*)
Australian Capital Territory	6.53	(*a*)
Australia	**1.21**	**1.48**

(*a*) Adjustment percentages, adjusted population and rates of increase are not published, becuase they would be subject to sampling variability too high for practical purposes.

CHAPTER 13. SOCIAL SECURITY AND WELFARE SERVICES

Family allowances

Family allowances are payable to people with children under 16 years of age, or over 16 but under 25 years of age and receiving full-time education at a school, college or university and not in employment. There is no means test. Allowances are usually paid to the mother and to be eligible she must reside, or intend to reside, permanently in Australia and have the care of one or more children. Special conditions apply if the person does not intend to reside permanently in Australia

From July 1976, the rates of family allowances (formerly child endowment) were substantially increased in conjuction with the abolition of taxation rebates for dependent children.

The new rates are compared with the old rates below.

	New rate $ per week	*Old rate* $ per week
First child	3.50	0.50
Second child	5.00	1.00
Third child	6.00	2.00
Fourth child	6.00	2.25
Fifth and later children	7.00	2.50 plus 25c for each subsequent child
Students	(*a*)	1.50
Child in an institution	5.00	2.00

(*a*) The rate of family allowance for each student depends on the position of the student in the family.

At 30 June 1976, there were 4,357,000 children (including student children) covered by the allowances.

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This list refers to special articles and other more or less important miscellaneous matter which have appeared in previous issues of the Year Book but which are not included, or are included in abbreviated form only, in the present issue.

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GENERAL INDEX*

This index is preceded by a list of the special articles, etc., which have appeared in previous issues of the Year Book. The illustrations contained in this issue are listed under the various chapters in the Contents (pages vii–xii). *Where more than one reference to a subject is given, the chief reference, wherever it has been possible to determine it, is indicated by italic type. Two references to a subject so indicated signify major, and approximately equal, importance.*

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